PREMIUMS

OFFERED BY THE

SOCIETY,

Inſtituted at LONDON,

FOR THE

ENCOURAGEMENT

OF

ARTS, MANUFACTURES,

AND

COMMERCE.

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MDCCLXXVII.

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Manures

Vines

TO

TO THE PUBLIC.

ADELPHI BUILDINGS, *April* 9, 1777.

THE Society for the Encouragement of Arts, Manufactures, and Commerce, propoſe, in purſuance of their plan, to beſtow the following Premiums:—

Premiums for Planting and Huſbandry.

1. ACORNS. For ſetting or ſowing the greateſt quantity of land, not leſs than ten acres, with acorns, between the twentieth of September 1776, and the firſt of May, 1777; and for fencing and preſerving the ſame effectually, in order to raiſe timber; the gold medal.

CERTIFICATES to be produced to the Society, on or before the firſt Tueſday in November, 1777, of the ſetting or ſowing agreeably to the above conditions, not leſs than ſix buſhels of acorns on each acre.

2. For the ſecond greateſt quantity of land, not leſs than five acres ſet or ſown with acorns, agreeably to the above conditions; the ſilver medal.

3. The ſame premiums are extended one year further.

CERTIFICATES to be produced on or before the firſt Tueſday in November, 1778.

4. CHESNUTS. For ſetting or ſowing the greateſt quantity of land, not leſs than ſix acres, with Spaniſh Cheſnuts, before the firſt day of May, 1777, and for effec-

tually fencing and preſerving the ſame, in order to raiſe timber; the gold medal.

5. For the ſecond greateſt quantity, not leſs than four acres; the ſilver medal.

6. For the third greateſt quantity, not leſs than two acres; the ſilver medal.

CERTIFICATES of ſetting or ſowing agreeably to the above conditions (and that there are five hundred Spaniſh Cheſnut plants at leaſt on each acre) muſt be delivered to the Society, on or before the firſt Tueſday in November, 1777.

7, 8, 9. The like premiums, on the ſame conditions, will be given for ſetting or ſowing Spaniſh Cheſnuts before the firſt of May, 1778.

CERTIFICATES to be delivered on or before the firſt Tueſday in November, 1778.

10. ELM. For planting the greateſt number of the Engliſh Elm, not leſs than one thouſand, between the twenty-fourth of June, 1776, and the twenty-fourth of June, 1777, and for the effectually fencing and preſerving the ſame, in order to raiſe timber: the gold medal.

11. For the ſecond greateſt number, not leſs than five hundred; the ſilver medal.

12. For the third greateſt number not leſs than four hundred; the ſilver medal.

CERTIFICATES of having planted, agreeably to the above conditions, and ſpecifying the diſtance of the trees, muſt be delivered to the Society, on or before the firſt Tueſday in November, 1777.

13, 14, 15. The like premiums on the ſame conditions, will be given for planting the Engliſh Elm, between the twenty-fourth of June, 1777, and the twenty-fourth of June, 1778.

CER-

CERTIFICATES to be delivered on or before the firſt Tueſday in November, 1778.

16. SCOTCH FIR. For planting out from the twenty-fourth of June, 1776, to the twenty-fourth of June, 1777, at a diſtance not leſs than four feet, the greateſt number of that Pine, commonly called the Scotch Fir, not leſs than twenty thouſand, to be two years old at leaſt when planted out, and for effectually fencing and preſerving the ſame, in order to raiſe timber; the gold medal.

17. For the ſecond greateſt number, not leſs than ten thouſand; the ſilver medal.

18. For the third greateſt number, not leſs than ten thouſand; the ſilver medal.

CERTIFICATES of planting according to the above conditions, and of the ſtate of the plants at Michaelmas preceding the date of the Certificates, to be delivered, on or before the laſt Tueſday in December, 1777.

N. B. Not leſsthan one acre to be planted in any one incloſure.

19, 20, 21. The like premiums will be given, on the ſame conditions, for planting out Scotch Firs, from the twenty-fourth of June, 1777, to the twenty-fourth of June, 1778.

CERTIFICATES to be delivered, on or before the laſt Tueſday in December, 1778.

22. WEYMOUTH PINE. For planting out in the year 1776, at a diſtance not exceeding three feet, the greateſt number of Weymouth Pines, not leſs than two thouſand, to be two years old at leaſt when planted out; and for effectually fencing and preſerving the ſame, in order to raiſe timber; the gold medal.

23. For the ſecond greateſt number, not leſs than one thouſand; the ſilver medal.

24. For the third greateſt number, not leſs than one thouſand; the ſilver medal.

CERTIFICATES of ſuch planting muſt be delivered on or before the laſt Tueſday in January, 1778.

25. CEDAR. For planting out from the twenty-fourth of June, 1776, to the twenty-fourth of June, 1777, at a diſtance not leſs than three feet, the greateſt number of the Red Virginia Cedar, not fewer than five thouſand, the plants to be between two and four years old when planted out, and for effectually fencing and preſerving the ſame, in order to raiſe timber; the gold medal.

26. For the next greateſt number, not fewer than three thouſand; the ſilver medal.

CERTIFICATES of planting according to the above conditions to be produced on or before the laſt Tueſday in November, 1777.

27, 28. The ſame premiums are extended to the year 1778.

CERTIFICATES to be produced, on or before the laſt Tueſday in November, 1778.

29. CEDAR. For planting out from the twenty-fourth of June, 1778, to the twenty-fourth of June, 1779, at a diſtance not more than four feet, the greateſt number of the Red Virginia Cedar, not fewer than five thouſand, the plants to be between two and four years old when planted out, and for effectually fencing and preſerving the ſame, in order to raiſe timber; the gold medal.

30. For the next greateſt number, not fewer than three thouſand; the ſilver medal.

CERTIFICATES of planting according to the above conditions to be produced on or before the laſt Tueſday in November, 1779.

31. SPRUCE FIR. For planting out in one plantation, in the year 1777, at proper diſtances, the greateſt number of Spruce Firs, not leſs than ten thouſand, to be

two

two years old when planted out, and for effectually fencing and preſerving the ſame, in order to raiſe timber; the gold medal.

32. For the ſecond greateſt number, not leſs than ſix thouſand; the ſilver medal.

33. For the third greateſt number, not leſs than four thouſand; the ſilver medal.

CERTIFICATES to be produced, on or before the laſt Tueſday in January, 1778.

34. SPRUCE FIR. For planting out in one plantation, in the year 1778, at a diſtance nor more than three feet, the greateſt number of Spruce Firs, not leſs than ten thouſand, to be two years old when planted out, and for effectually fencing and preſerving the ſame, in order to raiſe timber; the gold medal.

35. For the ſecond greateſt number, not leſs than ſix thouſand; the ſilver medal.

36. For the third greateſt number, not leſs than four thouſand; the ſilver medal.

CERTIFICATES to be produced on or before the laſt Tueſday in January, 1779.

37. SILVER FIR. For planting out in the year 1777, at not more than four feet diſtant, the greateſt number of Silver Firs, not leſs than two thouſand, and for effectually fencing and preſerving the ſame, in order to raiſe timber; the gold medal.

38. For the ſecond greateſt number, not leſs than one thouſand; the ſilver medal.

39. For the third greateſt number, not leſs than one thouſand; the ſilver medal.

CERTIFICATES to be produced, on or before the laſt Tueſday in January, 1778.

40, 41, 42. The like premiums will be given on the ſame conditions for Silver Fir, planted in the year 1778.

CERTIFICATES to be produced, on or before the laſt Tueſday in January, 1779.

43. LARCH. For planting out, from the 24th of June, 1775, to the 24th of June, 1776, at a diſtance not more than three feet, the greateſt number of Larch trees, not leſs than five thouſand, the plants to be between two and four years old when planted out, and for effectually fencing and preſerving the ſame, in order to raiſe timber; the gold medal.

44. For the ſecond greateſt number, not leſs than three thouſand; the ſilver medal.

CERTIFICATES of planting according to the above conditions, and of the ſtate of the plants at Michaelmas, preceding the date of the Certificates, to be delivered on or before the laſt Tueſday in November, 1777.

45, 46. The like premiums will be given on the ſame conditions for planting out Larch Trees, between the 24th of June, 1777, and the 24th of June, 1778.

CERTIFICATES to be produced, on or before the laſt Tueſday in November, 1778.

47, 48. The like premiums will be given on the ſame conditions, for planting out Larch Trees, between the 24th of June, 1778, and the 24th of June, 1779.

CERTIFICATES to be produced, on or before the laſt Tueſday in November, 1779.

49, 50. The like premiums will be given on the ſame conditions for planting out Larch Trees, between the 24th of June, 1779, and the 24th of June, 1780.

CERTIFICATES to be produced, on or before the laſt Tueſday in November, 1780.

51. UTILITY OF LARCH. To the perſon who ſhall ſend in the moſt ſatisfactory account, verified by experiment

experiments of the Utility of Larch Trees, for the various purpoſes of timber; the gold medal, or thirty pounds.

The accounts to be produced, on or before the ſecond Tueſday in December, 1782.

52. NORFOLK WILLOW. For the greateſt number of acres, not leſs than ſix, planted in the year 1776, with Norfolk Willows; the number of cuttings to be at leaſt one thouſand on each acre, properly fenced and ſecured.

CERTIFICATES to be produced on or before the laſt Tueſday in December, 1777, of the ſaid planting, and that the trees were then growing on the land; the gold medal, or thirty pounds.

53. The ſame premium, on the like conditions, will be given for Norfolk Willows planted in the year 1777.

CERTIFICATES to be produced on or before the laſt Tueſday in December, 1778.

54. OCCIDENTAL PLANE TREES. For the greateſt quantity of land not leſs than two acres, planted with Occidental Plane Trees, in the year 1777, not leſs than five hundred on each acre, properly fenced and ſecured.

CERTIFICATES to be produced to the Society, on or before the laſt Tueſday in December, 1777, of the ſaid planting, and that the trees were then growing on the land; the gold medal.

55. The ſame premium will be given on the ſame conditions for Occidental Plane Trees, planted in the year 1778.

CERTIFICATES to be produced on or before the laſt Tueſday in December, 1778.

56. The ſame premium will be given for Occidental Plane Trees planted in the year 1779.

CERTIFICATES to be produced on or before the laſt Tueſday in December, 1779.

57. ALDER. For the greateſt number of acres, not leſs than ſix, planted in the year 1776, with Alders, to be at leaſt one thouſand on each acre, properly fenced and ſecured.

CERTIFICATES to be procured to the Society on or before the laſt Tueſday in December, 1777, of the ſaid planting, and that the trees were then growing on the land; the gold medal, or thirty pounds.

58. UPLAND OR RED WILLOW. For the greateſt number of acres, not leſs than three, planted in the year 1777, with Upland or Red Willow, properly fenced and ſecured, the number of plants on each acre to be at leaſt ſeven hundred.

CERTIFICATES to be produced, on or before the laſt Tueſday in December, 1777; the gold medal, or thirty pounds.

59. ASH. For planting the greateſt number of acres, not leſs than ſix, in the year 1777, with Aſh for Timber; the plants to be at leaſt two years old, properly ſecured and fenced; the gold medal, or thirty pounds.

60. For the next greateſt number of acres, not leſs than four; the ſilver medal, or twenty pounds.

CERTIFICATES to be delivered on or before the ſecond Tueſday in March, 1778.

61, 62. The ſame premiums are extended to the year 1778.

CERTIFICATES to be delivered on or before the ſecond Tueſday in December, 1779.

63, 64. The ſame premiums are extended to the year 1779.

CERTIFICATES to be delivered on or before the ſecond Tueſday in December, 1780.

65. LOMBARDY OR PO POPLAR. For planting in the year 1777, the greateſt number, not leſs than one thouſand, of the Lombardy Poplar, or Po Poplar, properly

perly fenced and ſecured, for raiſing timber; the gold medal.

CERTIFICATES to be produced on or before the ſecond Tueſday in November, 1777.

66. The ſame premium is extended to the year 1778.

CERTIFICATES to be produced, on or before the ſecond Tueſday in November, 1778.

N. B. This tree is called by ſome the Pine Poplar.

67. TREES FOR USE WHEN EXPOSED TO THE WEATHER. To the perſon who ſhall ſend the moſt ſatisfactory account verified by experiments, to determine which of the following trees is of the greateſt utility for timber, or poles, for uſe when expoſed to the weather, viz.

Larch,	Black Poplar,
Aſh,	Spaniſh Cheſnut,
Willow,	Alder.

Lombardy Poplar,

The gold medal, or twenty pounds.

The accounts to be produced, on or before the ſecond Tueſday in December, 1782.

68. PLANTING BOGGY OR MORASSY SOILS. For an account of the beſt ſet of experiments ſent by the planter, or his repreſentative, to aſcertain the comparative advantages of planting boggy or moraſſy ſoils, with White Poplar, Black Poplar, Lombardy Poplar, and Willow; the gold medal.

It is required, that not leſs than half an acre be planted with each, and the plants to be not more than four feet aſunder.

It is alſo required, that the plantation ſtand fourteen years, at the end of which to be all cut down and meaſured, or accurately meaſured ſtanding, and certificates of the meaſure and value, and that the whole is properly fenced and ſecured, to be produced, on or before the firſt Tueſday in January, 1792.

N. B. Any information relative to the ſtate of the plantation, if ſent to the Society, between the times of planting and claiming the premium, will be thankfully received.

69. The

69. The ſame premium is extended one year further.

CERTIFICATES to be produced, on or before the firſt Tueſday in January, 1793.

70. The ſame premium is extended one year further.

CERTIFICATES to be produced, on or before the firſt Tueſday in January, 1794.

71. TRANSPLANTING WHEAT. For the beſt account of a ſet of experiments to determine whether in any, or in what caſes the tranſplanting Wheat may be practiſed to advantage, to be produced, on or before the firſt Tueſday in January, 1778; the gold medal.

It is expected, that the time of ſowing and tranſplanting, the nature of the ſoil, the produce and quality of the grain, and the expence of tranſplanting be particularly ſpecified; and that theſe experiments be made in the open field.

It has been hinted, that when a crop of Wheat has been injured by the worms, or other accidents, the tranſplanting roots from thoſe parts of the field where they ſtand the thickeſt, may be attended with advantage.

If an experiment of this kind is made, it is required that a comparative trial be alſo made, by ſowing and hoeing in grain on part of the ſpots ſo injured.

72. CULTURE OF WHEAT. For the beſt ſet of experiments to aſcertain whether it is moſt advantageous to cultivate Wheat, by ſowing it in the common broad-caſt way, or by drilling it in equi-diſtant rows, hand-hoeing the intervals; the gold medal, or twenty pounds.

It is deſired that the diſtance between the rows may not exceed eleven inches, and that an account of the nature and condition of the land on which the experiments are made, together with an account of the produce of the corn, be produced to the Society, on or before the firſt Tueſday in March, 1778.

73. The ſame premium is extended one year further. The accounts to be produced to the Society, on or before the firſt Tueſday in March, 1779.

74. FOR

74. FOR ASCERTAINING DISTANCES OF ROWS IN DRILLING HUSBANDRY. For an account of the beſt ſet of experiments, to aſcertain the reſpective diſtances of the rows, which will be moſt advantageous in the drill culture of any of the ſeveral kinds of Grain, Pulſe, and Roots, with a deſcription of the hoeing inſtruments employed in the culture; the gold medal.

The accounts to be delivered in, on or before the firſt Tueſday in December, 1777.

75. QUANTITY OF CORN TO BE SOWN. For an account of the beſt ſet of experiments made to determine the moſt proper Quantity of Corn of any kind, to be ſown in broad-caſt, on an acre of land, according to the different qualities of ſoil; to be produced on or before the firſt Tueſday in February, 1779; the gold medal.

It is required that the perſon claiming the premium, do give an account at what period the land was manured; of the kind and quantity of the manure laid on each acre; as alſo, when the land was laſt under a ſummer fallow, and at what time the corn was ſown, and the quantity of ſeed and produce.

76. QUANTITY OF WHEAT. To the perſon who ſhall raiſe the greateſt quantity of Wheat, per Acre, on not leſs than one acre of land; the gold medal, or twenty pounds.

CERTIFICATES of the exact produce, and an account of the ſoil, preparation, and culture; to be produced on or before the firſt Tueſday in December, 1777.

N. B. No claim for leſs than five quarters will be admitted.

77. BARLEY. The ſame premium will be given on the like conditions for the greateſt quantity, not leſs than ſix quarters, of Barley, per acre.

78. OATS. The ſame premium will be given on the like conditions for the greateſt quantity, not leſs than eight quarters, of Oats, per acre.

79. PEAS.

79. PEAS. The ſame premium will be given on the like conditions for the greateſt quantity, not leſs than five quarters, of Peas, per acre.

80. QUANTITY OF BEANS. To the perſon who ſhall raiſe the greateſt quantity of Beans, being not leſs than eight quarters on one acre of land, the gold medal, or fifteen pounds.

CERTIFICATES, of the exact produce, with an account of the ſoil, preparation, culture, and expence; and that the Beans were reaped, threſhed, and meaſured in the field the ſame day; to be produced on or before the firſt Tueſday in December, 1777.

81. QUANTITY OF WHEAT. To the perſon who ſhall raiſe the greateſt quantity of clean Wheat, per Acre, or not leſs than one acre of land; the gold medal, or twenty pounds.

CERTIFICATES, with an account of the ſoil, preparation, culture, and produce, and that the Wheat was reaped, threſhed, and meaſured in the field the ſame day, to be produced on or before the firſt Tueſday in December, 1778.

N. B. No claim for leſs than five quarters will be admitted.

82. BARLEY. The ſame premium will be given on the like conditions for the greateſt quantity, not leſs than ſix quarters, of Barley, per acre.

83. OATS. The ſame premium will be given on the like conditions for the greateſt quantity, not leſs than eight Quarters, of Oats, per acre.

84. PEAS. The ſame premium will be given on the like conditions for the greateſt quantity, not leſs than five Quarters, of Peas, per acre.

85. QUANTITY OF BEANS. To the perſon who ſhall raiſe the greateſt quantity of Beans, being not leſs than eight

eight quarters on one acre of land, the gold medal, or fifteen pounds.

CERTIFICATES, of the exact produce, with an account of the ſoil, preparation, culture, and expence; and that the Beans were reaped, threſhed, and meaſured in the field the ſame day; to be produced on or before the firſt Tueſday in December, 1778.

86. CULTIVATING TURNEPS AMONG BEANS. For an account of the beſt experiments made to determine the advantages ariſing from cultivating Turneps among Beans, either in the drill or broad-caſt way, on at leaſt ten acres of land, to be delivered on or before the firſt Tueſday in November, 1777; the gold medal.

87. For a ſimilar account on the next greateſt quantity of land, five acres at leaſt; the ſilver medal.

The Society expect to receive a particular account of the management of the land, from the ſowing of the Beans, to the laſt time of hoeing or cultivating the turneps; with an account of the quantity of Land, the produce, the ſoil, the aſpect, and the method, and time of eating them off.

The Society have received ſatisfactory accounts that Turneps have been drilled between horſe-hoed Beans, and ſown in the broad-caſt way among planted Beans to great advantage.

88. TURNEPS. For the beſt account of experiments, to determine the comparative advantages of the drill, or broad-caſt method in the cultivation of Turneps; the gold medal, or twenty pounds.

The accounts to be delivered in, on or before the firſt Tueſday in March, 1778.

89. The ſame premium is extended one year further. The accounts to be delivered, on or before the firſt Tueſday in March, 1779.

90, 91. LUCERNE AND BURNET. For the beſt ſet of experiments to determine the comparative advantage of

of the drill and broad-caſt methods in the culture of Lucerne and Burnet, ſeverally; the gold medal.

The accounts to be delivered, on or before the firſt Tueſday in December, 1777.

92. LUCERNE. To the perſon who ſhall cut the greateſt quantity of green Lucerne, per acre, from not leſs than three acres in one year; the gold medal.

93. For the next greateſt quantity, not leſs than two acres; the ſilver medal.

CERTIFICATES of the number of acres, the quantity cut, the times of cutting, nature of the ſoil, and method of culture, to be produced on or before the ſecond Tueſday in January, 1779.

94. NATURAL GRASSES. To the perſon who ſhall give the moſt ſatisfactory account of the different properties and comparative value of any two or more of the ſeveral natural graſſes; the gold medal.

95. For the account next in merit; the ſilver medal.

It is required that each graſs be ſown ſeparately, and an acre at leaſt, allotted for each graſs; that the whole be mowed the ſecond year, and fed the third year with ſheep and black cattle.

The certificates muſt ſpecify the nature of the ſoil; which graſs produced the moſt valuable crop of hay; as to quantity or quality; which made the moſt promiſing ſhoot after mowing; and which retained its verdure and vigour moſt for a late aftermath; which made the earlieſt ſhoot in the ſpring of the third year; and which Graſs or Graſſes the ſeparate cattle appeared moſt to like, For this experiment it is required the ſeveral acres of Graſs lye adjoining in the ſame field, and that a proper quantity of ſtock be kept on them the whole third year.

As in this experiment it is impoſſible to aſcertain the juſt proportion of the different cattle, it is earneſtly recommended

to

to the candidate to pay due attention to the increaſe or diminution of either ſort, as circumſtances require.

N. B. The Dwarf-Poa ought not to be mowed, being an annual, but will be admitted in the number, notwithſtanding what is required in regard to mowing the reſt in the ſecond year.

CERTIFICATES to be delivered on or before the firſt Tueſday in February, 1778, and proper ſpecimens of each of the Graſſes, when ripe, to be produced with the Certificates.

96, 97. The ſame premiums will be given on the like conditions for natural Graſſes the ſucceeding year.

The accounts to be produced to the Society on or before the firſt Tueſday in February, 1779.

N. B. The ſeveral Graſſes to be compared, to be ſown on as ſimilar ſoils as poſſible.

98. GREEN VEGETABLE FOOD. For the beſt account confirmed by experiments of the vegetable food, growing in the months of March and April, that will moſt increaſe the milk in mares, cows, and ewes, at that ſeaſon; provided ſuch food can be cultivated at an expence that will admit of its being applied to the above purpoſes; the gold medal.

CERTIFICATES to be produced on or before the ſecond Tueſday in November, 1777.

99. The ſame premium is extended one year further.

CERTIFICATES to be produced on or before the ſecond Tueſday in November, 1778.

100. MIXTURE OF GRASS SEEDS. For the beſt ſet of experiments to aſcertain the moſt advantageous mixture of different ſeeds for laying down arable land to graſs, on wet or ſtrong ſoils; the gold medal.

It is required that the experiments be comparative and continued three years; that not leſs than three different mixtures be tried, nor leſs than one acre be applied to each; and

and that the ſeeds uſed be ſeparate, not the produce of common meadows.

An account of the ſoil, preparation, crops of corn, (if any) ſeeds uſed, and the produce of the new graſs, whether fed or mown, to be delivered, on or before the firſt Tueſday in January, 1780.

101. The ſame premium will be given on the like conditions for aſcertaining the moſt advantageous mixture of different ſeeds for laying down arable land to graſs, on dry or light ſoils.

102, 103. The ſame premiums are extended one year further.

The accounts to be produced on or before the firſt Tueſday in January, 1781.

104. SOWING BURNET WITH NATURAL GRASSES. For an account of the beſt experiments made on at leaſt ten acres of land, to determine the utility of ſowing Burnet with natural Graſſes. To be delivered on or before the firſt Tueſday in December, 1777; the gold medal, or twenty pounds.

The quantity of the Burnet ſeed ſown, the kinds of Graſs or Graſſes ſown with it, the nature of the ſoil, appearance of the Burnet each year, annual produce, and its effects in feeding cattle, are to be ſpecified.

105. The ſame premium will be given on the like conditions for ſowing Burnet with natural Graſſes the ſucceeding year.

CERTIFICATES to be produced, on or before the laſt Tueſday in December, 1778.

106. TURNEP-ROOTED CABBAGE. For raiſing and duly cultivating Turnep-rooted Cabbage, in the year 1776, for the feeding cattle or ſheep, on the greateſt number of acres, not leſs than ten, and giving an account of the ſoil, culture, time, and manner of feeding off, produce, and the effects on cattle or ſheep fed with it; twenty pounds.

107. For

107. For the next greateſt number of acres, not leſs than five; ten pounds.

CERTIFICATES of the quantity of land, with the accounts, to be produced, on or before the laſt Tueſday in October, 1777.

108. The ſame premiums are extended one year further.

CERTIFICATES to be produced on or before the laſt Tueſday in October, 1778.

109. CULTIVATING ROOTS AND HERBAGE FOR FEEDING SHEEP AND BLACK-CATTLE. For the moſt ſatisfactory experiments made in the year 1776, on ſtrong land, in order to aſcertain which of the following plants can be cultivated and houſed, or otherwiſe ſecured for winter fodder, to the greateſt advantage, viz.

Turnep-rooted Cabbage,	Carrots,
Turnep Cabbage,	Parſneps,
Turneps,	Potatoes,

The accounts to be produced, on or before the firſt of November, 1777; the gold medal, or twenty pounds.

It is required that the above roots be taken off the land by the laſt day of October, 1776, that a crop of wheat may be ſown in the ſame ground, and the particulars of the ſowing and planting, taking up, produce, preſervation, and application to the feeding Sheep and Black Cattle be ſpecified. The comparative experiment muſt be made between two or more of any of the above-mentioned plants, and not leſs than two acres be cultivated with each particular kind of plant.

N. B. Great advantage will ariſe to the farmer occupying ſtrong land, in the neighbourhood of extenſive commons, from the conveniency of keeping large flocks of ſheep and herds of cattle, if the difficulty of ſupporting them through the winter was obviated by a due knowledge of this practice.

110. The ſame premium will be given for experiments made in the year 1777. The accounts to be produced, on or before the firſt of November, 1778. The roots to be taken off the land by the laſt day of October, 1777.

111. COMPARISON BETWEEN ROOTS AND HERBS. For an account of the beſt ſet of experiments made in the latter end of the year 1776, and beginning of the year 1777, to aſcertain the comparative merit of the herbs and roots below ſpecified, in feeding ſheep or black cattle; to be produced, on or before the third Tueſday in October, 1777; the gold medal, or twenty pounds.

No. I.	No. II.
Cabbage,	Turnep-rooted Cabbage,
Colewort,	Turnep Cabbage,
Borecole,	Turneps,
Anjou Cabbage,	Carrots,
Coleſeed,	Parſneps,
Savoy,	Potatoes.

The compariſon to be made between any two or more of the plants in the column No. I. and an equal number of the plants in the column No. II. the quantity of land to be at leaſt an acre for each of the plants; and each comparative experiment to be made on a ſimilar ſoil.

It is required that the particulars of the ſowing, or planting, taking up, produce, and application to the feeding ſheep or black cattle, be ſpecified.

N. B. It is the intention of the Society to give only one premium for the beſt ſet of experiments under the above advertiſement.

112. The ſame premium is extended to the year 1778.

CERTIFICATES to be produced, on or before the third Tueſday in October, 1778.

113. BORECOLE. For ſowing and duly cultivating Borecole in the year 1776, for the feeding of ſheep and black cattle, on the greateſt quantity of land, (not leſs than three acres) and giving an account of the time of ſowing,

ſowing, and planting out, diſtance of the plants, ſoil, culture, produce, and effects on cattle or ſheep fed with it; twenty pounds.

114. For the next greateſt quantity of land, not leſs than two acres; fifteen pounds.

CERTIFICATES to be produced on or before the firſt Tueſday in November, 1777.

115, 116. The ſame premiums are extended one year further.

CERTIFICATES to be produced, on or before the firſt Tueſday in February, 1778.

117. TURNEP-ROOTED CABBAGE. To the perſon who ſhall raiſe in the year 1776, the greateſt quantity, per acre, of Turnep-rooted Cabbage, on not leſs than one acre; the gold medal.

CERTIFICATES of the number of acres, and produce by weight, free from leaves and dirt, and before houſing, with an account of the ſoil, preparation, and culture, to be produced, on or before the firſt Tueſday in November, 1777.

118. TURNEPS. The like premium will be given on the ſame conditions for Turneps.

119. CARROTS. The like premium will be given on the ſame conditions for Carrots.

120. CLUSTERED POTATOES. The like premium will be given on the ſame conditions for Cluſtered Potatoes.

CERTIFICATES and accounts to be produced, on or before the firſt Tueſday in November, 1777.

121. The ſame premiums (from Claſs 117 to 120, incluſive) are extended one year further.

CERTIFICATES and accounts to be produced, on or before the the firſt Tueſday in November, 1778.

122. The ſame premiums are extended one year further.

CERTIFICATES to be produced on or before the firſt Tueſday in November, 1779.

123. SCOTCH CABBAGE. To the perſon who ſhall raiſe in the year 1777, the greateſt quantity per acre of that Cabbage, uſually known by the name of Scotch Cabbage, either the green or red kind, not leſs than one acre; the gold medal.

CERTIFICATES of the quantity of land, and produce by weight, free from roots and dirt, with an account of the ſoil, preparation, time of ſowing, and diſtance of rows, to be produced, on or before the firſt Tueſday in February, 1778.

The Candidate is to ſpecify whether it is the Green or red Cabbage for which the claim is made.

124, 125. AMERICAN AND DUTCH CABBAGE. The like premiums will be given on the ſame conditions for the American and Dutch Cabbages, ſeverally.

CERTIFICATES and accounts, to be produced, on or before the firſt Tueſday in February, 1778.

N. B. Not leſs than the produce of one fourth part of the acre, from Claſs 117, to Claſs 125, incluſive, indifferently choſen, to be weighed.

126. UTILITY OF POTATOES. For the moſt ſatisfactory experiments to aſcertain the Utility of Potatoes (except the cluſtered kind, for which ſeparate premiums are offered) in feeding black cattle; the gold medal.

It is required that the number of cattle ſo fed, be not leſs than five.

127. For the moſt ſatisfactory experiments to aſcertain the Utility of Potatoes in feeding ſheep; the gold medal.

It is required that the number of ſheep ſo fed, be not leſs than twenty.

128. For the moſt ſatisfactory experiments to aſcertain the Utility of Potatoes in feeding hogs; the gold medal.

It is required that the number of hogs ſo fed, be not leſs than ten.

129. For the moſt ſatisfactory experiments to aſcertain the Utility of Potatoes in feeding colts or horſes; the gold medal.

It is required that the number of colts or horſes ſo fed, be not leſs than three.

N. B. The quantity of food given muſt be weighed, as alſo the black cattle, ſheep, and hogs, both before and after fattening; and an exact account of every other particular relative thereto; ſpecifying the breed and age of ſuch black cattle, ſheep, and hogs; to be produced to the Society, on or before the firſt Tueſday in March, 1778.

130. UTILITY OF CLUSTERED POTATOES. The ſame premiums will be given on the ſame conditions for feeding black cattle, ſheep, hogs, and horſes, or colts, ſeverally, on Cluſtered Potatoes.

131. UTILITY OF CARROTS. The ſame premiums will be given on the ſame conditions for feeding black cattle, ſheep, hogs, and horſes, or colts, on Carrots.

132. UTILITY OF PARSNEPS. The ſame premiums will be given on the ſame conditions for feeding black cattle, ſheep, hogs, and horſes, or colts, on Parſneps.

CERTIFICATES to be produced on or before the firſt Tueſday in March, 1778.

133. LUCERNE FOR FATTENING CATTLE. For the moſt ſatisfactory account, verified by experiments, to aſcertain the utility of Lucerne in fattening black cattle; the gold medal.

It is required that the number of cattle ſo fattened, be not leſs than five.

CERTIFICATES to be produced on or before the laſt Tueſday in March, 1778.

N. B. The quantity of Lucerne given muſt be weighed, as alſo the cattle, both before and after fattening, and an exact account of every other particular relative thereto.

134. REARING BLACK CATTLE WITHOUT MILK. For an account of the beſt method of rearing black cattle without milk, excepting the firſt four days, verified by experiments; the gold medal, or twenty pounds.

The accounts to be produced to the Society, on or before the firſt Tueſday in February, 1778.

135. REARING AND FATTENING HOGS. For the beſt account of the moſt profitable method of rearing and fattening hogs, verified by experiments; to be delivered to the Society, on or before the firſt Tueſday in February, 1778; the gold medal, or twenty pounds.

N. B. The food muſt be weighed, as alſo the hogs, both before and after fattening.

136. MADDER. To the perſon who ſhall produce from one acre of land, the greateſt quantity of Madder properly prepared for the uſe of manufacturers, not leſs that twenty-five hundred weight; the gold medal or twenty-five pounds.

137. For the next greateſt quantity, not leſs than twenty hundred weight; the ſilver medal, or fifteen pounds.

Each claimant muſt ſpecify the different ſorts into which the Madder is divided, and the quantity of each ſort, and muſt ſend a ſample of two pounds weight of each ſort with proper Certificates of the whole quantity, being of the ſame quality with the reſpective ſpecimens, on or before the firſt Tueſday in November, 1777; as alſo a Certificate of its being the produce of one acre; and likewiſe a full account of the method of culture and preparation.

138. CULTIVATING THE TRUE RHUBARB. For raiſing, before the end of the year 1777, the greateſt number of plants, not leſs than one thouſand, of the *Rheum Palmatum*, or true Rhubarb; the gold medal.

139. For

139. For the next greateſt number, not leſs than five hundred plants, the ſilver medal.

CERTIFICATES of the number of plants, that they ſtand at leaſt ſix feet aſunder, that they have been in a thriving ſtate during the preceding ſummer, with an account of the ſoil, culture, and aſpect, to be produced, on or before the ſecond Tueſday in February, 1778.

140, 141. The ſame premiums are extended to the year 1778.

CERTIFICATES to be produced on or before the ſecond Tueſday in February, 1779.

142. RHUBARB. For the greateſt quantity of Rhubarb of Britiſh growth, not leſs than ten pounds weight, equal to ſuch as is commonly ſold in the ſhops, under the name of *Turkey* or *Ruſſia Rhubarb*, to be produced, with a particular account of the culture, and cure, on or before the firſt Tueſday in November, 1777; the gold medal.

143. For the next greateſt quantity, not leſs than ſix pounds; the ſilver medal.

144. RHUBARB. For the greateſt quantity of Rhubarb of Britiſh growth, not leſs than one hundred pounds weight, equal to ſuch as is commonly ſold in the ſhops, under the name of *Turkey* or *Ruſſia Rhubarb*, ten pounds of which to be produced as a ſample, with Certificates that the remainder is of equal goodneſs; and a particular account of the manner of culture, and cure, on or before the firſt Tueſday in November, 1778; the gold medal.

145. For the next greateſt quantity, not leſs than fifty pounds weight, the ſilver medal.

146. ORCHIS FOR SALEP. To the perſon who ſhall raiſe from ſeed the greateſt number, not leſs than one hundred plants, of the *Orchis Morio Fœmina*, or common female Orchis, for the purpoſe of making Salep; the gold medal.

CERTIFICATES of raiſing the plants; with an account of the method of culture, to be delivered, with a ſpecimen of the roots, on or before the laſt Tueſday in December, 1777.

 147. OR-

147. ORCHIS FOR SALEP. To the perſon who ſhall raiſe from ſeed the greateſt number, not leſs than one hundred plants, of any of the larger rooted Orchis, for the purpoſe of making Salep; the gold medal.

CERTIFICATES of raiſing the plants, with an account of the method of culture, to be delivered, with a ſpecimen of the roots, on or before the laſt Tueſday in December, 1777.

148. The ſame premium is extended one year further.

CERTIFICATES to be produced, on or before the laſt Tueſday in December, 1778.

149. SALEP. * To the perſon who ſhall make the greateſt quantity of good merchantable Salep, not leſs than fifty pounds weight, from any kind of Engliſh Orchis; twenty pounds.

A ſample of not leſs than ſeven pounds weight, with certificates of the expence and manner of preparing it, to be produced, on or before the firſt Tueſday in March, 1778.

150. IMPROVING LAND LYING WASTE. For the beſt account of a method for improving any of the following ſoils, being land lying waſte or uncultivated, viz. Clay, Loam, Gravel, Sand, Chalk, Limeſtone, Moor, or Peat-Earth, and Bog; verified by experiments on not leſs than ten acres of land, to be produced, on or before the ſecond Tueſday in December, 1777; the gold medal for each.

151. To the next in merit; the ſilver medal.

* The following method of making Salep was communicated by Mr. Moult, of Rochdale, to Dr. Percival, and printed in the ſecond volume of his Experimental Eſſays.

The new roots are to be waſhed in water, and the fine brown ſkin which covers them, is to be ſeparated by means of a ſmall bruſh, or by dipping them in hot water, and rubbing them with a coarſe linen cloth: the roots thus cleanſed are to be ſpread on a tin plate, and placed in an oven heated to the uſual degree, where they are to remain ſix or ten minutes, in which time they will have loſt their milky whiteneſs, and acquired a tranſparency like horn, without diminution of bulk; they are then to be removed to dry and harden in the air which will require ſeveral days, or by a gentle heat they will be finiſhed in a few hours.

An

An account of the ſoil, manner of improvement, expence, and product, are required to be fully explained.

152, 153. The ſame premiums are extended to the year 1777.

The accounts to be produced, on or before the ſecond Tueſday in December, 1778.

154, 155. The ſame premiums are extended to the year 1778.

The accounts to be produced, on or before the ſecond Tueſday in December, 1779.

156. MANURES. To the Perſon who ſhall give the moſt ſatisfactory account, verified by accurate experiments, on what ſoil the application of Marle, Chalk, Lime, or Clay ſeverally as manures, be moſt beneficial; the gold medal.

It is required that each experiment be made on one acre, and that they be continued four years, the ſame crop being ſown the ſame year on the ſeveral ſpots.

It is alſo required, that if different manures are compared, the experiments be made on ſimilar ſoils, lying near each other.

An account of the nature of the ſoil, manure, and the quantity laid on, with all expences and crops, to be delivered, with ſpecimens of the ſoil and manure, on, or before, the firſt Tueſday in January, 1780.

157. The ſame premium is extended one year further.

The accounts and ſpecimens to be produced on or before the firſt Tueſday in January, 1781.

158. The ſame premium is extended one year further.

The accounts and ſpecimens to be produced, on or before the firſt Tueſday in January, 1782.

159. MANURES. For the moſt ſatisfactory ſet of experiments, to aſcertain the comparative advantage of the following manures, uſed as Top-Dreſſings; viz. Soot, Coal-Aſhes, Wood-Aſhes, Lime, Gypſum, Night-Soil; the gold medal.

It

It is required that not leſs than half an acre of land be appropriated to each manure, the ſoils ſimilar, and lying near each other, and that the ſame crops be ſown in the ſame year on each ſpot; the experiments to be continued not leſs than two years.

An account of the nature of the ſoil, quantity, and expence of the manure and crops, with Certificates, to be produced, on or before the firſt Tueſday in December, 1777.

160. The ſame premium is extended to the year 1779. The accounts to be produced, on or before the firſt Tueſday in December, 1779.

161. ROLLING OR SCARRIFYING GRASS LAND. To the perſon who ſhall, by experiment, determine whether it is moſt beneficial to Graſs Land, to roll it with a heavy roller, or to cut the ſurface two or more inches deep at ſmall intervals, with an inſtrument commonly called a Scarificator (which is ſimilar to a harrow compoſed of coulters inſtead of tines); a buſh harrow and light roller being afterwards drawn over the part of the field thus ſcarrified; the gold medal.

It is required that the above experiment be made on natural graſs, whether old or new, meadow or upland, provided the ſame has been laid down at leaſt three years, and that the experiment be continued for four years at leaſt. An account of the nature of the ſoil, weight of the Roller, deſcription of the Scarificator, depth to which it cuts, and the comparative ſucceſs of each method; to be delivered, on or before the firſt Tueſday in November, 1777.

162. The ſame premium is extended to the year 1780. The accounts to be delivered in, on or before the firſt Tueſday in November, 1780.

163. To ASCERTAIN THE PROPER DEPTH OF PLOUGHING. To the Perſon who ſhall give the moſt ſatisfactory account, verified by accurate experiments, in order to determine the moſt proper Depth of Ploughing on clay or ſtrong land; fifty guineas. It

It is required that all experiments be made on ſimilar ſoils lying near each other, that each experiment ſhall conſiſt of two acres at leaſt, that the deepeſt ploughing be at leaſt four inches deeper than the reputed ſtaple of the land, or uſual depth of ploughing, and that theſe experiments be continued during a courſe of ſix years, the ſame crops being ſown the ſame year on the ſeveral ſpots. An account of the nature of the ſoil, different depths of ploughing, quantity of manure, (if any) laid on each ſpot, all expences and crops; to be delivered, on or before the firſt Tueſday in January, 1778.

164. To ASCERTAIN THE PROPER DEPTH OF PLOUGHING. To the perſon who ſhall give the moſt ſatisfactory account, verified by accurate experiments, in order to determine the moſt proper Depth of Ploughing, on clay or ſtrong land; the gold medal, or fifty guineas.

It is required that all experiments be made on ſimilar ſoils lying near each other, that each experiment ſhall conſiſt of two acres at leaſt, that the deepeſt ploughing be at leaſt four inches deeper than the reputed ſtaple of the land, or uſual depth of ploughing, and that theſe experiments be continued during a courſe of ſix years, the ſame crops being ſown the ſame year on the ſeveral ſpots. An account of the nature of the ſoil, different depths of ploughing, quantity of manure, (if any) laid on each ſpot, all expences and crops; to be delivered, on or before the firſt Tueſday in January, 1784.

N. B. If the above experiments be made on land, which has little or no fall, it is then required that the land be hollow-drained, at leaſt twelve inches deeper than the deepeſt ploughing.

165. To the perſon who ſhall, by the like experiments, on the above-mentioned ſoils, determine the depth of ploughing moſt proper for land, intended to be laid down in graſs for paſture; thirty guineas.

It

It is required that the ploughing, be continued with or without crops, during the ſpace of two years at leaſt before the land is laid in graſs. An account of the nature of the ſoil, depths of ploughing, crops, (if any) and produce of the graſs, whether mowed or fed during four years; to be delivered to the Society, on or before the firſt Tueſday in January, 1778.

166. ASCERTAINING THE BEST COURSE OF CROPS ON CLAY SOIL. To the Perſon who ſhall give the moſt ſatisfactory account, verified by comparative experiments, in order to aſcertain the Courſe of Crops, which with or without a fallow, ſhall, during the ſpace of eight years, prove moſt profitable, and ſhall leave the land in the beſt ſtate, on a Clay Soil; the gold medal, or fifty pounds.

It is required that ſuch comparative experiments be made, on three acres at leaſt in each mode; the ſoil to be as contiguous and ſimilar as poſſible. An account of the ſoil, management, and crops, to be delivered, on or before the firſt Tueſday in January, 1779.

167. The ſame premium is extended one year further. The accounts to be produced, on or before the firſt Tueſday in Januar7, 1780.

168, 169. ASCERTAINING THE BEST COURSE OF CROPS ON A DEEP LOAM. The ſame premiums will be given on the like conditions, for ſimilar comparative experiments on a Deep Loam,

170. ASCERTAINING THE BEST COURSE OF CROPS ON CLAY SOIL. To the perſon who ſhall give the moſt ſatisfactory account, verified by comparative experiments, in order to aſcertain the Courſe of Crops, which with or without a fallow, ſhall, during the ſpace of eight years, prove moſt profitable, and ſhall leave the land in the beſt ſtate, on a Clay Soil; the gold medal, or fifty pounds,

It

It is required that ſuch comparative experiments be made, on three acres at leaſt in each mode; the ſoil to be as contiguous and ſimilar as poſſible. An account of the ſoil, management, and crops, to be delivered, on or before the firſt Tueſday in January, 1786.

171. COURSE OF CROPS ON LIGHT LAND. For the moſt ſatisfactory account, verified by experiments, made on a dry ſoil, in order to aſcertain which of the two following courſes of crops is the moſt advantageous, viz.

1ſt Year Carrots,	1ſt Year Potatoes,
2d Year Barley,	2d Year Barley,
3d Year Clover,	3d Year Clover,
4th Year Wheat.	4th Year Wheat.

An account of the ſoils, culture, and produce of the ſeveral Crops, and the particular application of the Carrots and Potatoes, to be produced, on or before the firſt Tueſday in December, 1779; the gold med l, or thirty pounds.

It is required that not leſs than one acre be appropriated to each courſe, and that the ſoils be ſimilar, and as contiguous as poſſible.

172. The ſame premium is extended one year further.

The accounts to be produced on or before the firſt Tueſday in December, 1780.

173. COURSE OF CROPS ON STRONG LAND. For the moſt ſatisfactory account, verified by experiments, made on not leſs than five acres of Clays or wet Loams, to aſcertain the advantage of the following courſe of crops, viz. Firſt, Beans drilled, or planted and hoed. Secondly, Wheat; the gold medal, or twenty pounds.

Theſe experiments to be continued two courſes or four years.

CERTIFICATES, with an account of the ſoil, culture, and quantity of manure (if any) laid on, to be produced, on or before the laſt Tueſday in March, 1780.

N. B. The ſucceſs of this courſe of crops, much depending on the land being kept entirely clean, it is expected that

that each crop of the Beans be horſe or hand-hoed, at leaſt three times.

174. The ſame premium is extended one year further.

CERTIFICATES to be produced, on or before the laſt Tueſday in March, 1781.

175. The ſame premium is extended one year further.

CERTIFICATES to be produced, on or before the laſt Tueſday in March, 1782.

176. IMPROVING WASTE MOORS. For the improvement of the greateſt number of acres of Waſte Moor Land, not leſs than one hundred; the gold medal.

It is required that the land before improvement be abſolutely uncultivated, in a great meaſure uſeleſs, not let to any tenant, and without any building upon it, except cottages or huts. That in its improved ſtate it ſhall be encloſed, cultivated, and divided into fields of not more than ten acres each, with buildings erected thereon ſufficient for the uſe and reſidence of a tenant, and let on leaſe to one who occupies no other land.

CERTIFICATES of the number of acres, of the quality of the Moor ſo improved; of the mode and expence of the improvement; the ſtate it is in as to the proportion of graſs to arable; the rent at which it is let; and that the incloſure is not effected by act of parliament; to be produced, on or before the firſt Tueſday in February, 1779.

177. The ſame premium will be given on the like conditions in the year 1780.

CERTIFICATES to be produced, on or before the laſt Tueſday in February, 1780.

178. IMPROVING WASTE MOORS. For the improvement of the greateſt number of acres of Waſte moor land, not leſs than one hundred; a piece of plate of the value of one hundred pounds with a ſuitable inſcription.

It

It is required, that the land before improvement be abſolutely uncultivated, in a great meaſure uſeleſs, not let to any tenant, and without any building upon it, except cottages or huts. That in its improved ſtate it ſhall be encloſed, cultivated, and divided into fields of not more than ten acres each, with buildings erected thereon ſufficient for the uſe and reſidence of a tenant, and let on leaſe to one who occupies no other land.

CERTIFICATES of the number of acres; of the quality of the Moor ſo improved; of the mode and expence of the improvements; the ſtate it is in as to the proportion of graſs to arable; the rent at which it is let; and that the encloſure is not effected by act of parliament; to be produced, on or before the firſt Tueſday in February, 1781.

179. The ſame premium is extended one year further;

CERTIFICATES to be produced, on or before the firſt Tueſday in February, 1782.

180. The ſame premium is extended one year further;

CERTIFICATES to be produced, on or before the firſt Tueſday in February, 1783.

181. PLOUGH TO CUT WATER FURROWS IN ARABLE LAND. For the beſt Plough for cutting Water Furrows in Arable Land, the earth to be thrown out on one ſide only, and the draught not to exceed the power of four horſes, or oxen; twenty pounds.

The ploughs to be produced to the Society, on or before the firſt Tueſday in January, 1778.

182. DRILL PLOUGH. For the beſt Drill Plough for different ſeeds, being an improvement on thoſe already in the poſſeſſion of the Society, or generally known; to be produced to the Society, on or before the firſt Tueſday in March, 1778; the gold medal, or thirty pounds.

183. DRILL PLOUGH FOR HORSE BEANS. For the beſt Drill Plough for Horſe Beans only, in three rows twelve inches aſunder; to be produced to the Society, on

on or before the firſt Tueſday in January, 1778; twenty pounds.

It is expected the plough be ſtrong and cheap, no variation of depth or diſtance being required.

N. B. The Plough being deſigned on Strong Land, to work on Ridges; the horſes muſt be harneſſed abreaſt, and walk in the furrows.

184. DRAIN PLOUGH. For the beſt Plough for cutting Drains at one Stroke, to be drawn by not more than ten horſes or oxen; the Drain to be not more than two inches wide at bottom, and twelve at top, and not leſs than two feet deep; the gold medal, or fifty pounds.

The Plough to be produced to the Society, on or before the firſt Tueſday in January, 1778.

N. B. Strength and ſimplicity in the conſtruction and cheapneſs of the machine, will be conſidered as parts of its merit.

185. DRILL PLOUGH FOR CARROTS. For the beſt Drill for ſowing Carrot Seed only, in three Rows, one foot aſunder, to be produced, on or before the firſt Tueſday in January, 1778; thirty pounds.

186. MACHINE FOR WASHING ROOTS. For inventing a Machine, by which Carrots, Potatoes, Turnep-rooted Cabbage, or other Roots may be waſhed more expeditiouſly and cheaper than by any method now practiſed, twenty pounds.

It is required that the Machine may be worked in ſtagnant, as well as in running water.

Simplicity and cheapneſs in the conſtruction will be conſidered as principal parts of its merits; to be produced, on or before the third Tueſday in January, 1778.

187. MACHINE TO ANSWER THE PURPOSE OF REAPING OR MOWING CORN. For inventing a Machine to anſwer the purpoſe of mowing or reaping Wheat, Rye, Barley, Oats, or Beans, by which it may be done more expeditiouſly, and cheaper than by any method now practiſed, provided it does not ſhed the Corn

or

or Pulſe, more than the methods in common practice, and that it lays the ſtraw in ſuch manner as may be eaſily gathered up for binding; the gold medal, or thirty pounds.

The Machine, with certificates that at leaſt three acres have been cut by it, to be produced to the Society, on or before the ſecond Tueſday in December, 1777.

Simplicity and cheapneſs in the conſtruction will be conſidered as principal parts of its merit.

188. The ſame Premium is extended one year further, the Machine to be produced, on or before the ſecond Tueſday in December, 1778.

189. MACHINE TO CONVEY WINTER CROPS. For inventing a Machine or Carriage for the purpoſe of conveying green winter Crops off wet arable Land, by which the work may be done cheaper, and with leſs poaching and injury to the land than by any method now practiſed; twenty pounds.

The Machine or Carriage to be produced to the Society, on or before the ſecond Tueſday in January, 1778.

Premiums for Diſcoveries and Improvements in Chemiſtry and Mineralogy.

190. KELP. For the greateſt quantity, not leſs than four tons of Kelp, as free as poſſible from common Salt, Sand, and other Impurities; and containing a much larger proportion of Alkaline Salt than any Kelp now made for ſale.

A ſpecimen of one hundred weight, to be produced, on or before the firſt Tueſday in January, 1778; together with Certificates that the whole quantity is equal to the ſpecimen, and made in Great Britain or Ireland of the Sea weed, commonly called Kelp or Alga; the gold medal, or twenty pounds.

191. BARILLA. For the greateſt quantity of merchantable Barilla, not leſs than half a ton, made from Spaniſh Kali, raiſed in Great Britain; the gold medal, or twenty pounds.

A ſample of not leſs than twenty-eight pounds, with a Certificate that half a ton has been made, to be produced, on or before the firſt Tueſday in January, 1778.

192. The ſame premium is extended one year further.

CERTIFICATES to be produced on or before the firſt Tueſday in January, 1779.

193. NATIVE FOSSIL FIXT ALKALI. To the perſon who ſhall diſcover in Great Britain, Ireland, or the Britiſh American colonies, and bring into the port of London, in the year 1777, the greateſt quantity, not leſs than two hundred weight, of the Native Foſſil Fixt Alkali, fit for the purpoſes of the ſoap-makers; thirty pounds.

A ſample, not leſs than fifty pounds weight (as got out of the earth,) with Certificates deſcribing the place where found, and the quantity brought in, to be produced, on or before the laſt Tueſday in January, 1778.

194. The

194. The ſame premium is extended one year further. The ſample and certificates, to be produced, on or before the laſt Tueſday in January, 1779.

195. The ſame premium is extended one year further. The ſample and Certificates to be produced, on or before the laſt Tueſday in January, 1780.

196. NATIVE FOSSIL FIXT ALKALI FROM THE EAST INDIES. To the perſon who ſhall import into the port of London, in the year 1777, the greateſt quantity, not leſs than ten hundred weight, of the Native Foſſil Fixt Alkali, fit for the purpoſes of the ſoap-makers, being the produce of any part of the Britiſh poſſeſſions in the Eaſt Indies; the gold medal, or thirty pounds.

A ſample, not leſs than fifty pounds weight, with proper Certificates to be produced, on or before the laſt Tueſday in January, 1778.

197. The ſame premium is extended one year further. The ſample and Certificates to be produced, on or before the laſt Tueſday in January, 1779.

198. The ſame premium is extended one year further. The ſample and Certificates to be produced on or before the laſt Tueſday in January, 1780.

199. FOSSIL FIXT ALKALI. For diſcovering the beſt method of obtaining from ſea ſalt, the Natron or Foſſil Alkali in a pure ſtate fit for the purpoſes to which Fixt Alkaline Salts are applied, and at an expence that will not render it too dear to be uſed in bleaching, ſoap-making, dying, and other great works, where pearl-aſh, pot-aſh, barilla, or kelp, are now emyloyed; the gold medal, or fifty pounds.

A ſample of fifty pounds weight, and Certificates that two hundred weight, at leaſt, had been manufactured by the candidate, to be produced, on or before the third Tueſday in December, 1777.

200. GLASS FOR ACHROMATIC PURPOSES. For the beſt ſpecimen of White Flint Glaſs, ſuperior to any hitherto made for Achromatic Teleſcopes, not leſs than twenty pounds weight. The plates being at leaſt one quarter of an inch in thickneſs, and ſix inches in diameter, having the greateſt diſperſive power, free of veins, waves, and other irregularities, and to be very tranſparent; to be produced, on or before the third Tueſday in December, 1777; fifty pounds.

201. PLATES OF GLASS. For the greateſt number of plates of glaſs made in England, not fewer than fifty, of a ſize not leſs than twenty-ſix inches by thirty-ſix, with the fire poliſh on them, as flat and thin as thoſe imported from Holland, and equally fit for the purpoſe of glazing prints; ſix plates as a ſpecimen, and proper Certificates of making the whole number; to be produced to the Society, on or before the ſecond Tueſday in December, 1777; fifty pounds.

202. PRESERVING SEEDS OF VEGETABLES. For the beſt method of preſerving the ſeeds of plants in a ſtate fit for vegetation, after having been kept a conſiderable time, ſuch method being ſuperior to any known to the public, and verified by ſufficient trials; to be communicated to the Society, on or before the firſt Tueſday in December, 1777; the gold medal.

203. The ſame premium is extended to the year 1778. To be communicated, on or before the firſt Tueſday in December, 1778.

204. DESTROYING SMOKE. For the beſt account, aſcertained by proper experiments, of a method of deſtroying or burning the ſmoke of fires belonging to Steam Engines, or other large works, in order to prevent annoyance to the neighbourhood; to be produced, on or before the firſt Tueſday in February, 1778; the gold medal, or fifty pounds.

205. ACCOUNT OF BLEACHING. For an account of the beſt and cheapeſt method of bleaching linen, being

being an improvement on the methods now in uſe; to be produced to the Society, with a ſample of linen, not leſs than twenty yards, bleached according to ſuch method, on or before the ſecond Tueſday in February, 1778; the gold medal, or twenty pounds.

206. GREEN DYE ON COTTON. For the greateſt improvement of the Green Dye on printed Cotton or Linen, the colour to ſtand waſhing, and the common trials for diſcharging dyes, a quantity not leſs than three yards of cotton or linen cloth ſo dyed, to be produced to the Society, on or before the third Tueſday in January, 1778; thirty guineas.

207. BRICKS FOR MENDING ROADS. For the beſt contrivance of a furnace to burn bricks in the fields, where the clay for making them is found, and near the places where they are wanted for the purpoſe of mending roads; twenty pounds.

A deſcription and ſome model of the furnace to be produced to the Society, on or before the laſt Tueſday in November, 1777.

N. B. Attention is to be had to ſimplicity, facility, and cheapneſs of conſtruction, to the end that a number of ſuch furnaces may locally be erected, with materials readily found to ſave charges and carriage.

208. DISCHARGING STAINS OF GREASE FROM MARBLE. For diſcovering to the Society an effectual method of diſcharging ſtains of greaſe from marble, without injuring the texture and colour of the ſtone; ten pounds.

The accounts to be produced, on or before the ſecond Tueſday in January, 1778.

209. SUBSTITUTE OR PREPARATION OF YEAST. For diſcovering to the Society an effectual Subſtitute for Yeaſt, or preparation of Yeaſt, for fermenting Liquors, and raiſing Bread, that may be preſerved for uſe, better than any hitherto generally known; twenty pounds.

Specimens of the Subſtitute, or of the preparation of Yeaſt, ſufficient for trials; together with a paper ſealed up, and containing an account of the compoſition of the Subſtitute or Method of preparing the Yeaſt, to be produced, on or before the laſt Tueſday in November, 1777.

210. WHITE TOUGH IRON. To the perſon who ſhall eſtabliſh a work of white tough iron, as free from Impurities as poſſible, fit for making barrels of guns, hilts of ſwords, and other purpoſes, for which ſuch Metal is required, and which will bear, when Caſe-hardened, a poliſh nearly as fine as hardened caſt Steel; fifty pounds.

Specimens not leſs than fifty-ſix pounds weight: together with a paper ſealed up, and containing the proceſs uſed in preparing it, to be delivered, on or before the firſt Tueſday in November, 1777.

211. METHOD OF COMPARING SWEETS. To the perſon who ſhall diſcover to the Society an index, or practicable method of comparing, meaſuring, and aſcertaining the degrees of ſweetneſs in ſaccharine ſubſtances; the gold medal, or fifty pounds.

To be produced, on or before the firſt Tueſday in March, 1778.

212. METHOD OF ASCERTAINING THE STRENGTH OF VINOUS SPIRITS. To the perſon who ſhall invent and produce to the Society the moſt accurate inſtrument or method, ſuperior to any at preſent in uſe in Great Britain, for aſcertaining the different degrees of ſtrength in vinous ſpirits; the gold medal, or twenty-five pounds.

To be produced, on or before the firſt Tueſday in March, 1778.

Premiums for promoting the Polite Arts.

213. HONORARY PREMIUMS FOR DRAWINGS. For the beſt Drawings of any kind, made with chalk, black lead, pen, Indian ink, or biſter, by young gentlemen under the age of twenty-one, ſons or grandſons of Peers, or Peereſſes in their own right, of Great Britain or Ireland; to be produced, on or before the firſt Tueſday in March, 1778; the honorary medal of the Society in gold.

214. The ſame in ſilver for the ſecond in merit.

215, 216. The ſame premiums will be given on the like conditions, to young ladies, daughters, or grand daughters, of Peers or Peereſſes, in their own right, of Great Britain or Ireland.

217. HONORARY PREMIUMS FOR DRAWINGS. For the beſt Drawing of any kind, by Young Gentlemen; to be produced, on or before the firſt Tueſday in March, 1778; the gold medal.

218. For the next in merit; the ſilver medal.

219, 220. The ſame premiums will be given for drawings by Young Ladies.

N. B. Perſons profeſſing any branch of the Polite Arts, or any Buſineſs dependant on the Arts of Deſign, or the Sons or Daughters of ſuch Perſons will not be admitted Candidates in theſe Claſſes.

221. DRAWINGS OF OUTLINES. For the beſt Outline after any original Group, or Caſt in Plaſter of human Figures, by Perſons of either Sex, under the Age of ſixteen; the principal Figure not leſs than twelve inches; to be produced, on or before the laſt Tueſday in October, 1777; the greater ſilver pallet.

222. For the next in merit; the leſſer ſilver pallet.

N. B. Theſe Outlines are to be made on paper, with Chalk, Black Lead, Pen, Indian Ink, or Biſter: and the originals either to be produced to the Society, or to be referred to for their Examination.

223. DRAWINGS AFTER PICTURES. For the beſt drawing of a naked human figure, not leſs than ſixteen inches, after a picture, by youths under the age of ſixteen; to be produced, on or before the laſt Tueſday in November, 1777; the greater ſilver pallet.

224. For the next in merit; the leſſer ſilver pallet.

The drawing to be made with Indian Ink, Chalk, or Black Lead, and of a different ſize from the original, which muſt be produced at the ſame time.

225. DRAWINGS OF LANDSCAPES. For the beſt drawing of Landſcapes, after nature; to be produced, on or before the ſecond Tueſday in November, 1777; the gold pallet.

226. For the next in merit; the greater ſilver pallet.

227. For the next in merit, the leſſer ſilver pallet.

Each candidate muſt mention, on the front of his drawing, from whence he took his view; and the drawings muſt be made with Chalk, Pen, Indian Ink, or Biſter.

228. HISTORICAL DRAWINGS. For the beſt Hiſtorical Drawing, being an original compoſition of five or more human figures; the height of the principal figure not leſs than eight inches; to be made with Chalk, Black Lead, Pen, Indian Ink, or Biſter; and to be produced on or before the firſt Tueſday in February, 1778; the gold pallet.

229. DRAWINGS OF FRUIT, FLOWERS, OR PLANTS. For the beſt drawing after nature, of Fruit, Flowers, or Plants, to be made with crayons, or water-colours,

colours, by perſons of either ſex, under the age of one and twenty; to be produced, on or before the third Tueſday in October, 1777; the greater ſilver pallet.

230. To the next in merit; the leſſer ſilver pallet.

231. DRAWINGS OF BEASTS. For the beſt drawing and compoſition of three or more Beaſts after nature; the principal figure to be not leſs than eighteen inches; by perſons of either ſex. To be made with Chalk, Black Lead, Pen, Indian Ink, Biſter, crayons, or water-colours; to be produced, on or before the ſecond Tueſday in October, 1777; the gold pallet.

232. For the next in merit; the larger ſilver pallet.

233. DRAWINGS OF BIRDS. For the beſt drawing and compoſition after nature, of not leſs than three different Birds, to be made with crayons, or water-colours, by perſons of either ſex, under the age of twenty one years; to be produced, on or before the ſecond Tueſday in October, 1777; the greater ſilver pallet.

234. For the next in merit; the leſſer ſilver pallet.

235. DRAWINGS OF MACHINES. For the beſt perſpective drawing, by perſons of either ſex, under the age of twenty-one years, of the model of an hydraulic machine, by Mr. Weſtgarth, in the Society's Repoſitory; Ten Guineas.

To be produced, on or before, the firſt Tueſday in January, 1778.

N. B. Such Candidates as propoſe to draw for this premium will be admitted by the Regiſter, any day (Sundays and Wedneſdays excepted) between the hours of ten and two.

The drawing to which the premium is adjudged, is to remain the property of the Society.

236. DRAW-

236. DRAWINGS OF A PLOUGH. For the beſt drawing from actual meaſurement of Mr. Brand's Plough, in the Repoſitory of the Society, on a ſcale of at leaſt one inch to a foot, (and its ſeveral parts delineated on the ſame ſcale, with proper references) the drawing to be made by youths under the age of ſixteen, and produced to the Society, on or before the firſt Tueſday in January, 1778; the leſſer ſilver pallet.

237. ENGRAVING ANIMALS AND PLANTS. For the beſt engraving of Animals or Plants, from original drawings, of which there are no prints, for the purpoſe of illuſtrating natural hiſtory, by perſons of either ſex under the age of twenty-five; twenty pounds.

To be produced to the Society, on or before, the firſt Tueſday in February, 1778.

The principal object not leſs than eight inches high, unleſs the original ſubject be not of that ſize.

238. ENGRAVING ON WOOD OR TYPE METAL. For the beſt original drawing and engraving, executed by the ſame artiſts, on wood or type metal for illuſtrating works in arts or ſcience, or for decorating books, and capable of being worked with the letter preſs; ten guineas.

The drawing and one or more ſpecimens of the engraving, united with the letter preſs, to be produced, on or before the firſt Tueſday in February, 1778.

N. B. The repreſentations of animals, plants, and machines, or proper deſigns for head or tail pieces of chapters, for the decoration of books, are the ſubjects deſired to be produced in claim of this premium.

239. PATTERNS FOR CALLICOE PRINTERS. For the beſt original pattern, of light or dark ground Chintz, fit for the purpoſes of Callicoe Printers, by perſons

ſons of either ſex; to be produced, on or before, the laſt Tueſday in October, 1777; ten pounds.

240. PATTERNS FOR CALLICOE PRINTERS. For the beſt original pattern, proper for Copper Plates, fit for the purpoſe of Callicoe Printers, for furniture or garments, by perſons of either ſex; to be produced on or before the laſt Tueſday in October, 1777; fifteen pounds.

241. MODEL OF A NAKED HUMAN FIGURE. For the beſt Model (in Clay or other material, or a caſt in plaſter from it) of a naked human figure after nature, and as large as the life; to be produced on or before the ſecond Tueſday in February, 1778; fifty guineas.

242. MODEL OF A HUMAN FIGURE WITH DRAPERY. For the beſt Model (in Clay or other material, or a caſt in plaſter from it) of a human figure, as large as the life, with Drapery, to be produced on or before the ſecond Tueſday in February, 1778; thirty guineas.

243. MODEL OF A VASE. For the beſt original Model of a Vaſe, elegantly ornamented, not leſs than twelve inches high, by youths under the age of twenty-one years; to be produced, on or before, the laſt Tueſday in December, 1777; the greater ſilver pallet.

No perſon who has gained the firſt premium in any claſs will be admitted a candidate in a claſs of an inferior age; and no candidate ſhall receive more than one premium in one year; nor will they, who, for two ſucceſſive years, ſhall gain the firſt premium in one claſs, be ever again admitted as candidates in that claſs.

No perſon ſhall ever be admitted a candidate in any claſs, in which he has three times obtained the whole of the firſt premium.

Perſons to whom premiums ſhall be adjudged, will be expected to give ſatisfactory proofs that the performances, by them produced, are entirely their own, without aſſiſtance.

No

No candidate ſhall ſend in more than one performance in any one claſs unleſs the conditions of particular Advertiſements give leave for producing more.

All the claims which are produced each year, before the Committee of Polite Arts (to which premiums or bounties are adjudged) are to remain with the Society one month after the determination.

No claim for a premium in the Polite Arts will be admitted, that has obtained, or has been produced in order to obtain, a premium, reward, or gratification from any other Society, or any academy or ſchool.

All performances that obtain premiums in the Polite Arts muſt be begun after the publication of ſuch premiums, unleſs there be a particular exception in the Advertiſement.

Premiums

Premiums for encouraging and improving Manufactures.

244. SILK. For the greateſt Quantity of merchantable Silk, not leſs than five pounds, produced by any one perſon in England, in the year 1777; the gold medal.

Specimens of the Silk, not leſs than one pound, with CERTIFICATES that the whole is of equal quality, and produced in England; to be delivered to the Society, on or before the firſt Tueſday in January, 1778.

245. For the ſecond greateſt quantity, not leſs than two pounds; the ſilver medal.

246, 247. The ſame premiums will be continued for the year 1778; the Certificates to be delivered, on or before the firſt Tueſday in January, 1779.

248. SILK WORMS. For an account of the beſt method of breeding and treating Silk Worms, in order to the obtaining ſilk, and alſo of the Proceſs of the further Preparation of the ſame to adapt it for manufacturers verified by experiments, with ſpecimens of the ſilk ſo obtained; to be produced, on or before the firſt Tueſday in December, 1777; the gold medal, or twenty guineas.

249. MULBERRY CUTTINGS. For raiſing the greateſt number of white or black Mulberry Trees, not leſs than one hundred, from cuttings, in the year 1777, which ſhall be growing in September, 1778.

CERTIFICATES of ſuch raiſing and growth, with the manner of culture, to be produced to the Society, on or before, the firſt Tueſday in November, 1778; twenty pounds.

250. BLACK SILK LACE. To the Gentleman or Lady, who ſhall cauſe the greateſt number of girls, in any

any one pariſh or town, to be taught the art of making black Silk Lace; the gold medal.

CERTIFICATES to be produced on or before the laſt Tueſday in December, 1777.

251. WEAVING FISHING NETS. For the beſt ſpecimen of plain netting, for Fiſhing Nets, not leſs than twenty yards long, and ſix feet deep, woven in a loom, or other machine; to be produced to the Society on or before the ſecond Tueſday in January, 1778; twenty guineas.

N. B. It is expected that the ſpecimen produced be made in ſuch manner as to be cut and joined without more loſs than uſual, and that it have ſuch a plain ſelvedge as the common fiſhing nets.

252. MACHINE FOR CARDING SILK. For the beſt machine for carding waſte ſilk, equally well as by hand; to be produced, together with a ſpecimen of the cardings, on or before the firſt Tueſday in November 1777; twenty-five pounds.

Premiums for Inventions in Mechanics.

253. STANDARD FOR WEIGHTS OR MEASURES. For diſcovering to the Society an invariable Standard for Weights or Meaſures, communicable at all times and to all nations, by means of letters or characters; to be produced, on or before the third Tueſday in March, 1779; the gold medal, or one hundred guineas.

The Diſcovery, whether in Writing, or by Model, muſt be practically demonſtrable.

N. B. The neareſt attempt hitherto made public, has been by means of a pendulum; but which from certain defects, well known to perſons of philoſophic learning, has not yet anſwered.

This premium is extended to perſons reſiding in any country whatever.

CAUTION TO THE CANDIDATES.

Whereas among the Candidates who have hitherto put in for this premium, ſeveral, (having miſunderſtood the Deſiderata of the Society) have inadvertently framed their propoſitions by referring to ſome of the preſent arbitrary and uncertain Weights and Meaſures of Europe, as if ſuch were already the *invariable ſtandards* required; therefore to prevent the like Errors in future; let each Candidate conſider well (ſuppoſing his Language could by tranſlation or otherways be intelligible to diſtant nations one or two Thouſand years hence) whether his propoſitions would be ſufficient to inform ſuch diſtant and future nations accurately how to make the ſame weights or meaſures as are or may be now known or eſtabliſhed in any part of Europe, ſo as that all nations then exiſting, to whom the Knowledge of their propoſitions ſhall come, may be taught thereby to make and uſe the ſame weights or meaſures without variation.

254.

254. HARPOONS. To the maſter of a veſſel, or any other perſon concerned in the whale fiſhery, who ſhall give the moſt ſatisfactory account, verified by repeated trials of the ſucceſs of the Gun Harpoon lately introduced in the Whale Fiſhery, uſed at a diſtance, not leſs than five fathom; ten guineas.

The accounts to be produced, on or before the third Tueſday in November, 1777.

255. GUN HARPOON. For every Whale taken by means of the Gun Harpoon; to the Harpooner who firſt ſtrikes ſuch fiſh therewith, one guinea; and further, to the Harpooner who takes by the ſame means the greateſt number of Whales, not leſs than three; ten guineas.

N. B. Proper Certificates of the taking ſuch Whales, in the year 1777, ſigned by the maſter; to be delivered to the Society, on or before the laſt Tueſday in December 1777.

256. MACHINE FOR TRANSPORTING TIMBER. To the perſon who ſhall produce to the Society a model of the beſt, moſt ſimple, and cheap Machine or Carriage for tranſporting Timber, or other heavy Materials, on ſoft or clayey roads, at the leaſt expence; to be ſent in on or before the laſt Tueſday in November, 1777; twenty guineas.

257. BREACHES IN BANKS. For an account verified by experiments, of a method of ſtopping Breaches in the Banks of the ſea or rivers, which ſhall be ſuperior to any hitherto practiſed or publiſhed, in this country; the gold medal.

The accounts to be produced, on or before the third Tueſday in March, 1778.

258. MACHINE FOR DRAINING LAND. To the perſon who ſhall invent and produce to the Society, a Machine for Draining Land, to raiſe the water not leſs than four feet; to be eaſily removed, and to be worked by wind, or other means.

To be produced, on or before the ſecond Tueſday in January, 1778; thirty guineas.

This Machine is expected to raiſe more water in proportion than any now in uſe; and that the ſails, if the Machine be

be worked by wind, ſhall not be ſhorter than five feet from the center.

N. B. The proper figure of the ſails will be conſidered as a material part of its excellence.

259. MACHINE FOR RAISING BALLAST. To the perſon who ſhall invent and produce a Machine, ſuperior to any hitherto in uſe, for raiſing Ballaſt, in order to clear away the ſhallows of the river Thames, and other rivers, and which ſhall leave the beds in the moſt even and regular ſtate; fifty pounds.

CERTIFICATES of the working of the Machine at large, with a model of ſuch Machine; to be produced, on or before the third Tueſday in November, 1778.

N. B. The Society have been informed, that ballaſt has been raiſed at eight pence per ton, at the depth of four feet, within forty miles of London.

260. MACHINE FOR RAMMING PAVEMENTS. To the perſon who ſhall invent and produce the beſt Machine, ſuperior to any hitherto in uſe for ramming pavements in the ſtreets of London, and elſewhere; twenty guineas.

The machine to be produced to the Society, on or before the ſecond Tueſday in January, 1778.

261. IMPROVEMENT OF THE HAND VENTILATOR. To the perſon who ſhall produce to the Society, on or before the laſt Tueſday in February, 1778; a portable Ventilator, not leſs than ſix feet long, two feet wide, and eighteen inches deep, to be worked by hand, better adapted for extracting foul air from goals, priſons, and ſhips than any now known or in uſe; twenty guineas.

262. ARCHIMEDEAN OR WATER SCREW. To the perſon who ſhall produce to the Society, the moſt ſatisfactory account or proof, either by model or otherwiſe, of the mean helical angle of an archimedean, or water ſcrew, which ſhall raiſe the greateſt quantity of water by a given power, under the reſpective angles of 30. 45. and 60 degrees of elevation of the whole machine; together with the proportion of the diameter of the ſhaft, to that of the whole internal diameter of the ſcrew, thirty guineas. To be produced on or before the third Tueſday in March, 1778.

Premiums offered for the Advantage of the Britiſh American Colonies.

263. VINES FOR RAISINS. To that perſon who ſhall, on the firſt of September, 1777, have, or be poſſeſſed of a vineyard or plantation, in any part of his Majeſty's dominions in America, conſiſting of the greateſt number of Vines (not leſs than fifty) actually producing the Malaga grape, or the red Smyrna grape, from which raiſins are made; the gold medal.

264. For the like plantation or vineyard, conſiſting of not leſs than twenty-five plants, producing the ſaid grapes; the ſilver medal.

The claimants for the above premiums muſt, at the time of making the claim, produce a quantity (not leſs than ſix pounds) of raiſins, certified to have been actually produced from vines, for which the premium is claimed.

265. To that perſon who ſhall, on the firſt of September, 1778 have, or be poſſeſſed of a Vineyard or Plantation in any part of his Majeſty's dominions in America, conſiſting of the greateſt number of vines, not leſs than fifty, producing Grapes, from which Raiſins may be made equal to thoſe imported from Malaga, or Smyrna; the gold medal.

266. WINES. For the greateſt quantity of good Wine, not leſs than two hogſheads, made in the year 1777, from grapes produced by vines of any of the kinds yielding wines in Europe, that ſhall have been planted after the firſt of January, 1773, in any part of his Majeſty's dominions in America; the gold medal.

267. For the next great quantity, not leſs than one hogſhead; the ſilver medal.

CERTIFICATES of the quantity and quality of ſuch wine, and of the ſtate of the vineyard where the vines grew, from two or more perſons of known credit, reſiding in the province; to be delivered to the Society, with a

ſample

ſample of not leſs than five gallons of the wine, before the end of the year 1778.

268. AMERICAN VINES. For the greateſt number, not leſs than two thouſand plants, of the natural Vines of America, which bear grapes, fit for making Wines properly planted out as a vineyard, ſuitable to thoſe climates; fenced, cultivated, and ſecured, between the firſt of February, 1774, and the firſt of February, 1777, in any part of his Majeſty's dominions in America; the gold medal.

269. For the ſecond greateſt number, not leſs than one thouſand plants, on the ſame conditions; the ſilver medal.

270. 271. The ſame premiums are further extended to the year 1778.

The claims upon the foregoing articles of culture to be reſpectively aſcertained by a Certificate under the hand of ſome magiſtrate, or chief officer of the county, pariſh, townſhip, or other diviſion of the colony, within which the article for which the premium is claimed, has been planted; that the ſaid article expreſſing the number of plants, and the name of the planter, has, of his own knowledge, or has been proved before him, to have been planted, and effectually ſecured and cultivated, within the ſaid colony, between the times ſpecified in the advertiſement; and was under actual and proper culture at the time of ſigning ſuch Certificate.

N. B. The claims ariſing from all the foregoing articles relative to the colonies muſt be made, and the Certificates be brought into the Society, together with five gallons of wine made from the ſaid grapes, within four months after the dates mentioned in the reſpective advertiſements.

It is deſired that the claimants do deſcribe the ſoils and aſpects of the vineyards, which produced the preceding articles.

272. AMERICAN COTTON. For the beſt ſpecimen, not leſs than ten pounds of Cotton, produced in the Britiſh dominions in America, or the Weſt Indies, equal to the fine Braſilian Cotton; to be produced, with

CERTIFICATES of the place of growth, on or before the firſt Tueſday in January, 1778; the gold medal.

273. ANNATTO. For the beſt ſpecimen of Annatto, not leſs than ſix pounds weight, produced in any part of his Majeſty's dominions in America, or the Weſt Indies, equal to the beſt Spaniſh Annatto; to be produced to the Society, with

CERTIFICATES of the place of production, on or before the end of the year 1777; the gold medal.

274. INDIGO. For the beſt ſpecimen of Indigo, made in his Majeſty's dominions in America or the Weſt Indies, equal to Guatimala Indigo, not leſs than four pounds; to be produced to the Society, with

CERTIFICATES of the place where it was made, and an account of the culture and proceſs; on or before the firſt Tueſday in February, 1778; the gold medal.

275. MOSSES, PLANTS, BARKS, AND BERRIES. For a ſpecimen, not leſs than twenty pounds weight of the beſt ſort of Moſs of the growth of America, and there known to be of uſe in dying, but not yet introduced into this country; ten pounds.

It is required that ſamples of goods dyed therewith, together with an accurate account of the proceſs, be ſent to the Society, on or before the end of the year 1777.

276, 277, 278. The ſame premiums will be given, on the ſame conditions, for Moſſes, Plants, Barks, or Berries, ſeverally.

279. BARILLA. For the greateſt quantity of merchantable Barilla, not leſs than ten hundred weight, made in any part of his Majeſty's dominions in America, and imported into any port in England, in the year 1777; fifteen pounds.

280. For

280. For the next greateſt quantity, not leſs than eight hundred weight; ten pounds.

The ſample with Certificates, to be produced, on or before the laſt Tueſday in January, 1778.

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281. CAMPHOR TREE. To the perſon who ſhall cultivate, in any part of his Majeſty's dominions in the Weſt Indies, the greateſt number, not leſs than twenty-five, of the trees which produce Camphor in the Eaſt Indies; the gold medal, or fifty pounds.

CERTIFICATES, under the hand of the Governor, Lieutenant Governor, or chief Magiſtrate of the Iſland, ſpecifying the number of plants, and that they are in a growing or thriving ſtate, together with a branch of the tree, and ſome of the leaves, to be produced to the Society, on or before the ſecond Tueſday in November, 1777.

282. The ſame premium is extended one year further.

CERTIFICATES to be produced on or before the ſecond Tueſday in November, 1778.

283. PERUVIAN BARK, or QUINQUINA. To the perſon who ſhall introduce, into any of his Majeſty's dominions in the Weſt Indies, the greateſt number, not leſs than ten, of the Quinquina, or that tree which yields the Peruvian or Jeſuits Bark, on or before the firſt Day of January, 1777; fifty pounds.

CERTIFICATES, under the hands of the Governor, Lieutenant Governor, or chief Magiſtrate of the Iſland, ſpecifying the number of plants, and that they are in a growing or thriving ſtate, together with ſpecimens of the bark, and branches of the tree to be deliveted to the Society, on or before the ſecond Tueſday in October, 1777.

284. PERUVIAN BARK; or, QUINQUINA. To the perſon who ſhall introduce into any of his Majeſty's dominions in the Weſt Indies, or any other of his Majeſty's colonies in America, the greateſt number, not leſs than ten, of the Quinquina, or that tree, which yields the Peruvian

or Jeſuits bark, on or before the firſt day of January, 1778; one hundred pounds.

CERTIFICATES, under the hands of the governor, lieutenant-govenor, chief magiſtrate, or principal officer of the iſland, colony, or ſettlement, ſpecifying the number of plants, and that they are in a growing or thriving ſtate, together with ſpecimens of the bark and branches of the tree, to be produced on or before the ſecond Tueſday in October, 1778.

285. The ſame premium is extended one year further.

CERTIFICATES to be produced on or before the ſecond Tueſday in October, 1779.

286. NUTMEGS. For the greateſt quantity of merchantable Nutmegs, not leſs than five pounds weight, being the growth of his Majeſty's dominions in America, or the Weſt Indies, and nearly equal to thoſe imported from the iſlands of the Eaſt Indies; the gold medal, or one hundred pounds.

Satisfactory CERTIFICATES from the governor, or lieutenant-governor, or ſome perſons of known credit, of the place of growth, with an account of the number of trees, their age, nearly the quantity of fruit on each tree, and the manner of culture, to be produced on or before the firſt Tueſday in January, 1780.

287. The ſame premium is extended one year further.

CERTIFICATES to be produced, on or before the firſt Tueſday in January, 1781.

288. The ſame premium is extended one year further.

CERTIFICATES to be produced on or before the firſt Tueſday in January, 1782.

289. The ſame premium is extended one year further.

CERTIFICATES to be produced, on or before the firſt Tueſday in January, 1783.

290. SESSAMUM SEED. For the greateſt quantity of Seſſamum ſeed, not leſs than one ton, for the purpoſe of

of expreſſing oil, imported into the port of London from any of his Majeſty's colonies in America, or the Weſt Indies, on or before the ſecond Tueſday in December, 1777; twenty pounds.

291. OIL OF SESSAMUM SEED. For the greateſt quantity of oil of Seſſamum ſeed, not leſs than two tons, expreſſed in any of his Majeſty's colonies in America, or the Weſt Indies, and imported into the port of London, on or before the ſecond Tueſday in December, 1777; the gold medal, or forty pounds.

292. GROUND NUTS. For the greateſt quantity of ground nuts, not leſs than two tons, for the purpoſe of expreſſing oil, imported into the port of London, from any of his Majeſty's colonies in America, or the Weſt Indies on or before the ſecond Tueſday in December, 1777; twenty pounds.

293. OIL OF GROUND NUTS. For the greateſt quantity of oil of ground nuts, not leſs than two tons, expreſſed in any of his Majeſty's colonies in America, or the Weſt Indies, and imported into the port of London, on or before the ſecond Tueſday in December, 1777; the gold medal, or forty pounds.

The ſeed and nuts muſt be in a proper condition for yielding the oil; and the oil imported muſt be fit for the purpoſes of manufacturers.

Proper Certificates of the importation, with bills of lading, to be produced on or before the ſecond Tueſday in January, 1778.

294, 295, 296, 297. The ſame premiums are extended one year further.

CERTIFICATES to be produced on or before the ſecond Tueſday in January, 1779.

298, 299, 300, 301. The ſame premiums are extended one year further.

CERTIFICATES to be produced on or before the ſecond Tueſday in January, 1780.

N. B. It is propoſed, that the Society ſhould retain four hundred weight of the Seſſamum Seed and Ground Nuts, and ten gallons of each of the oils, to which the premium is adjudged, paying a reaſonable price for the ſame.

302. SILK IN MINORCA. For every pound of merchantable raw ſilk, made in the iſland of Minorca, and imported into the port of London, in the year 1777, two ſhillings and ſixpence; but if the quantity ſhall exceed two hundred pounds weight, then the ſum of twenty-five pounds ſhall be divided among the claimants, in proportion to the quantity ſent by each.

Each claimant muſt prove to the Lieutenant-governor of the iſland, or ſome perſon appointed by him, that the ſilk is produced by worms reared in the iſland, and Certificates of the ſame, ſigned by the Lieutenant-governor, or the perſon ſo appointed by him, to be produced, with proper Certificates of the importation into the port of London, on or before the firſt Tueſday in February, 1778.

303. The ſame premium is extended one year further.

CERTIFICATES to be produced, on or before the firſt Tueſday in February, 1779.

304. The ſame premium is extended one year further.

CERTIFICATES to be produced on or before the firſt Tueſday in February, 1780.

305. 306. BREAD FRUIT TREE. To the perſon or perſon who between the firſt of June and the fifteenth of Auguſt 1778, ſhall bring into the port of London the greateſt number of plants of one or both ſpecies of the bread fruit tree, in a growing ſtate; not leſs than three of either ſpecies, the gold medal, or fifty pounds.

307. 308. The ſame premiums are extended to the year 1779 and 1780.

N. B. The plants which obtain the premiums are to be the property of the Society, to be diſpoſed of according to their diſcretion.

General

General Conditions.

Notwithſtanding the Society reſerve to themſelves the power of giving, in all caſes, ſuch part only of any premium as the performance ſhall be adjudged to deſerve, or of with-holding the whole, if there be no merit; yet the Candidates may be aſſured, the Society will always judge liberally of their ſeveral claims.

It is required that the matters for which premiums are offered, be delivered in without names, or any intimation to whom they belong; that each particular thing be marked in what manner each claimant thinks fit, ſuch claimant ſending with it a paper ſealed up, having on the outſide a correſponding mark, and on the inſide the claimant's name and addreſs.

No papers ſhall be opened, but ſuch as ſhall gain premiums, unleſs where it appears to the Society abſolutely neceſſary for the determination of the claim: all the reſt ſhall be returned unopened, with the matters to which they belong, if enquired after by their marks within two years; after which time, if not demanded, they ſhall be publickly burnt, unopened, at ſome meeting of the Society.

All models of machines which obtain premiums or bounties, for the future, ſhall be the property of the Society.

All the premiums of this Society are deſigned for that part of Great Britain, called England, the dominion of Wales, and the Town of Berwick upon Tweed, unleſs expreſly mentioned to the contrary.

The claims ſhall be determined as ſoon as poſſible after the delivery of the ſpecimens.

No perſon ſhall receive any premium, bounty, or encouragement from the Society, for any matter for which he has obtained a patent.

A Candidate for a premium, or a perſon applying for a bounty, being detected in any diſingenuous method to impoſe on the Society, ſhall forfeit ſuch premium or bounty, and be deemed incapable of obtaining any for the future.

The performances which each year obtain premiums or bounties, are to remain with the Society until the end of May, except as mentioned in the Conditions annexed to the premiums offered for promoting the polite Arts.

No member of this Society ſhall be a candidate for, or intitled to receive any premium, bounty, or reward whatſoever, except the honorary medal of this Society.

Where Certificates are required to be produced in claim of premiums, they ſhould be expreſſed as nearly as poſſible in the words of the reſpective advertiſements, and ſhould not be from the Candidate, (ſolely) but from ſome other perſon, or perſons, who have a poſitive knowledge of the facts certified.

Where premiums, or bounties, are obtained, in conſequence of ſpecimens produced, the Society mean to retain ſuch part as they may judge neceſſary, making a reaſonable allowance for the ſame.

By Order of the Society.

SAMUEL MORE, Secretary.

N. B. Any information or advice that may forward the deſigns of this Society for the public good, will be received thankfully, and duly conſidered, if communicated by letter, addreſſed to the Society, and directed to Mr. MORE, the Secretary, at the Society's Office, in the Adelphi Buildings, London.

*** In caſe any perſon ſhould be inclinable to leave a ſum of money to this Society by will; the following form is offered for that purpoſe.

Item,

Item, I give and bequeath unto A. B. and C. D. the ſum of upon condition, and to the intent, that they, or one of them do, pay the ſame to the Collector for the time being, of a Society in London, who now call themſelves the Society for the Encouragement of Arts, Manufactures, and Commerce; which ſaid ſum of I will, and deſire may be paid out of my perſonal Eſtate, and applied towards carrying on the laudable deſigns of the ſaid Society.

CLAIMS

CLAIMS *to be made, and* CERTIFICATES *to be brought, on or before*

Anno 1777.

June the 1ſt Day. AMERICAN Vines,

October 2d *Tueſday.*
- Drawings of Beaſts.
- Drawings of Birds.
- Peruvian Bark.

3d *Tueſday.*
- Drawings of Fruit, Flowers, or Plants.
- Compariſon between Roots and Herbs.

Laſt *Tueſday.*
- Drawings of Outlines.
- Patterns for Calicoe Printers,
- Turnep-rooted Cabbage.

November 1ſt *Tueſday.*
- Acorns.
- Cheſnuts.
- Elm.
- Madder.
- Mulberry Cuttings.
- Machine for Carding Silk,
- White Tough Iron.
- Turneps among Beans.
- Cultivating Roots and Herbs for feeding Sheep and Black Cattle.
- Borecole.
- Rhubarb.
- Rolling or Scarifying Graſs Land.
- Turnep-rooted Cabbage.
- Turneps.
- Carrots.
- Cluſtered Potatoes.

Drawings

2d *Tueſday.*	Drawings of Landſcapes. Lombardy, or Po Poplar. Green vegetable food. Campher Tree.
3d *Tueſday.*	
November, laſt *Tueſday.*	Harpoons, Account of. Drawings after Pictures. Machine for tranſporting Timber. Larch. Bricks for mending Roads. Subſtitute, or preparation of Yeaſt. Cedar. Green Dye.
December, 1ſt *Tueſday.*	Aſcertaining Diſtances of Rows in Drill Huſbandry. Silk Worms. Lucerne. Burnet. Preſerving Seeds. Sowing Burnet with natural Graſſes. Quantity of Wheat. Beans. Barley. Oats. Peas. Manures.
2d *Tueſaay.*	Plates of Glaſs. Improving Land lying Waſte. Machine for reaping Corn. Seſſamum. Ground Nuts. Oil.
3d *Tueſday.*	Glaſs for achromatic Purpoſes. Foſſil fixt Alkali.

Scotch

Laſt *Tueſday.*	Scotch Fir. Norfolk Willow. Occidental Plane Tree. Alder. Upland or Red Willow. Model of a Vaſe. Black Silk Lace. Orchis. Gun Harpoon.
Laſt *Day.*	Moſſes, Plants, Barks or Berries. Annatto.
Anno 1778.	
January, 1ſt *Tueſday.*	Vines for Raiſins. Wine. Silk. American Cotton. Kelp. Drawings of Machines. Ditto of a Plough. Plough to cut Water Furrows. Drill Plough for Horſe-Beans. Tranſplanting Wheat. Drain Plough. Drill Plough for Carrots. Barrilla. Aſcertaining proper Depth of Ploughing.
2d *Tueſday.*	Fiſhing Nets. Machine for draining Land. Diſcharging Greaſe from Marble. Machine to convey Winter Crops. Machine for Ramming Pavements.

Machine

3d *Tueſday.*	Machine for Waſhing Roots.
Laſt *Tueſday.*	Weymouth Pine. Silver Fir. Spruce Fir. Foſſil Alkali. Barilla. Larch.
February, 1ſt *Tueſday.*	Natural Graſſes. Rearing Black Cattle without Milk. Rearing and Fattening Hogs. Silk in Minorca. Deſtroying Smoke. Hiſtorical Drawings. Indigo. Engraving Animals, &c. Engraving on Wood or Type Metal. Scotch Cabbage. American and Dutch Cabbage.
February, 2d *Tueſday.*	Account of Bleaching. Rhubarb. Model of a Human Figure.
Laſt *Tueſday.*	Hand Ventilator.

Honorary

March, 1ſt *Tueſday*.	Honorary Premiums for Drawings. Drill Plough. Turneps. Salep. Potatoes. Carrots. Parſneps. Method of comparing Sweets. Aſcertaining Strength of Vinous Spirits. Culture of Wheat.
2d *Tueſday*.	Aſh.
3d *Tueſday*.	Breaches in Banks. Machine for raiſing Ballaſt. Archimedean Screw.
Laſt *Tueſday*.	Culture of Wheat. Utility of Parſneps. Lucerne for fattening Cattle.

APPEN-

APPENDIX.

PREMIUMS ADJUDGED IN CONSEQUENCE OF THE ADVERTISEMENTS, IN 1776.

AGRICULTURE.

Claſs 68. Lombardy, or Poplar. — To *Richard Muilman Trench Chiſwell*, Eſq; of *Debden-Hall*, *Eſſex*, for planting eleven thouſand; the gold medal.

CHEMISTRY.

Claſs 218. Large annual Sun-Flower Seed. — To the Reverend Mr. *Henry Bryant*, of *Heydon*, in *Norfolk*, for producing fifteen buſhels; twenty pounds.

POLITE ARTS.

Claſs 239. Drawings of Landſcapes. — To Mr. *William Auguſtus Barron*, *Little St. Martin's Lane*; firſt premium, the gold pallet.

To Mr. *Robert Barret*, at Mr. *Barret's*, *Weſtborne Green*; ſecond premium, the greater ſilver pallet.

To Mr. *John Feary*, No. 4, *Mill Bank*; third premium, the leſſer ſilver pallet.

Claſs 253. Patterns for Callicoe Printers. — To Mr. *Robert Laurie*, at Mr. *Sayer's Fleet-ſtreet*; part of the premium, ten guineas.

Claſs 227. Drawings after Pictures. — To Mr. *Peter Denys*, at Mr. *Pars's* Drawing School; firſt premium, the greater ſilver pallet.

Claſs 231. Hiſtorical Drawings. — To Mr. *William Martin*, at Mr. *Cipriani's*, *Hedge Lane*; firſt premium, the gold pallet.

Claſs 238. Drawings of Machines. — To Mr. *James Hunter*, at Mr. *Arrow's*, *Rocheſter Row*, *Weſtminſter*; part of the premium, five guineas.

Claſs 243. Engraving on Wood or Type Metal. — To Mr. *William Coleman*, No. 9, *Round Court*, *St. Martin's Le Grand*; part of the premium, ten guineas.

Claſs 247. Model of a human Figure. — To Mr. *John Bacon*, No. 17, *Newman Street*; the whole premium, fifty guineas.

Claſs 224. Honorary Premium for Drawings. — To the Honourable Miſs *Egerton*, *Groſvenor Street*; the gold medal.

Claſs 223. Honorary Premiums for Drawings. — To Mr. *William Maſon*, *Charlotte Street*, *Bloomſbury*; ſecond premium, the ſilver medal.

Claſs 239. Drawings of Landſcapes. — To Mr. *Thomas Hearne*, at Mr. *Garvock's*, St. *Martin's-ſtreet*, *Leiceſter-fields*; firſt premium, the gold pallet.

To Mr. *Charles Tomkins*, (No. 75.) *Queen Ann-ſtreet*, *Eaſt*; ſecond premium, the greater ſilver pallet.

Claſs

Claſs 235. Drawing of Outlines. — To Miſs *Ann Smith*, at Mr. *Freeman's*, *Cary-ſtreet*; ſecond premium, the leſſer ſilver pallet.

Claſs 237. Drawings after Pictures. — Mr. *Thomas Denys*, at Mr. *Pars's* Drawing School, *Strand*; firſt premium, the greater ſilver pallet.

Mr. *William Artaud*, at Mr. *Pars's* Drawing School, *Strand*; ſecond premium, the leſſer ſilver pallet.

Claſs 245. Drawings of Beaſts. — To Mr. *Barnard Paul*, at Mr. *Laycock's*, in the *Haymarket*, near *Piccadilly*; ſecond premium, the greater ſilver pallet.

MECHANICS.

Claſs 272. Gun Harpoon. — To *Joſeph Coulſon*, Harpooner on board the ————, Capt. *Foord*, for a fiſh ſtruck at the diſtance of twelve fathom, one guinea.

COLONIES and TRADE.

Claſs 500. Zebra Wood. — To *George Hewm*, Eſq; of the *Moſquito Shore*, for importing twenty-five thouſand eight hundred and fifty-ſeven feet, the gold medal.

BOUNTIES and PRESENTS, in 1776.

To Mr. *Alexander Monies*, at Mr. *Kilburn*'s, *Sun-court*, *Threadneedle-ſtreet*, for a drawing of *Venus*; the leſſer ſilver pallet.

To Mr. *Robert Laurie*, in *Johnſon's-court*, *Fleet-ſtreet*, for diſcloſing his method of printing Mezzotinto in colours; thirty guineas.

To Mr. *Robert Hodgkinſon*, at *Blythe*, in *Nottinghamſhire*, for a drawing of Ruins; the greater ſilver pallet.

To Mr. *Frazer*, for his invention of a machine for fiſhing up goods from the bottom of the Sea, of which a model is in the Repoſitory of the Society; ten guineas.

To Mr. *Spalding*, of *Edinburgh*, for his improvement of the Diving Bell; twenty guineas.

To Mr. *William Shipley*, of *Maidſtone*, *Kent*, for his invention of a floating Light, intended to preſerve the lives of thoſe who fall overboard at ſea, and preſenting the ſame to the Society; the ſilver medal.

To Mr. *M'Enzie*, for a new conſtructed Umbrella; five guineas.

To Mr. *John Hudſon*, for his Carriage for turning in a ſhort Angle; twenty guineas.

To Mr. *Groſs*, of *Hoxton*, for his Coach Brace; ten guineas.

A CATALOGUE OF THE MACHINES AND MODELS IN THE REPOSITORIES OF THE SOCIETY FOR THE ENCOURAGEMENT OF ARTS, MANUFACTURES, AND COMMERCE:

Which may be Viewed and Examined every Day, (SUNDAYS and WEDNESDAYS excepted) by any Gentlemen who ſhall apply to the Regiſter, at the Society's Houſe, in the Adelphi Buildings, between the Hours of Eleven and Two.

CONTENTS.

A

CATALOGUE, &c.

CLASS I.

Machines and Models ſubſervient to Manufactures.

I. A New-invented Comb-Pot, by Mr. S. Hayward, for which the ſociety gave him a bounty of thirty guineas, April 13, 1763.

II. A longſhed Spinning-Wheel, by Mr. Thomas Perrin; for which he had the firſt premium of thirty pounds, April 8, 1762.

III. A Spinning-Wheel, by Mr. John Webb; for which he had the firſt premium of twenty pounds, March 25, 1761.

IV. A Spinning-Wheel, by Mr. Thomas Perrin; for which he had the ſecond premium of twenty pounds, March 25, 1761.

V. A Horizontal Spinning-Wheel, by Mr. William Harriſon; for which he had the firſt premium of fifty guineas, April 11, 1764.

VI. A Spinning-Wheel, by Mr. Perrin; for which he had the ſecond premium of twenty pounds, May 6, 1765.

VII. A Spinning-Wheel, by Mr. Garrat; for which he had thirty pounds, part of the premium of fifty pounds, April 9, 1766.

VIII. A Spinning-Wheel, by Mr. Garrat; for which he had fifteen pounds, part of the ſecond premium of twenty pounds, April 9, 1767.

IX. A Machine for Winding and Doubling Worſted, by Mr. Jeremiah Burrows; for which he had ten pounds, part of the premium of ſeventy-five pounds, April 17, 1765.

X. A Machine for Winding and Doubling, by Mr. Crager; for which he had ten pounds, part of the premium of ſeventy-five pounds, April 17, 1765.

XI. A Machine for Winding and Doubling, by Mr. Garrat; for which he had twelve pounds, part of the premium of twenty-five pounds, April 9, 1766.

XII. A Reel for Winding Silk from the Cocoons, by Mr. Verrier; for which he had a bounty of forty pounds, June 14, 1762.

XIII. A Silk Reel, preſented to the Society, by John Pownall, Eſq;

XIV. A complete Frame and Reel, with a Baſon and Furnace, of the proper ſize to Wind Silk from the Cocoons, agreeable to the preſent beſt method of working in Italy.

XV. A Model of a Loom for Brocades, by Mr. Sebaſtian Favie; for which he had a bounty of three guineas, October 27, 1761.

XVI. A Stocking Frame, by Mr. Samuel Unwin; for which

which he had a premium of one hundred pounds, February 14, 1765.

XVII. A Stocking frame, by Mr. Whyman; for which he had a premium of one hundred pounds, April 16, 1766.

XVIII. A Loom by Mr. J. Almond, for which he had a bounty of fifty guineas, 1771.

XIX. A Machine for Doubling and Twiſting, by Mr. Sing, for which he had a bounty of ſeven guineas, 1771.

CLASS II.

Models of Mills, Cranes, Machines for raiſing Water, Carriages, and other Machines and Implements not reducible to any particular Claſs.

I. A Model of a Saw-Mill, by Mr. James Stainsfield; for which the Society gave him one hundred pounds, and ten guineas for his improvement of a Croſs cutting Saw added thereto, December 12, 1766.

N. B. The original Mill, of which this is a model was erected, and worked for five ſucceſſive years, in conſequence of ſucceſſive premiums offered, and paid by the Society; amounting in the whole to the ſum of two hundred and twenty-five pounds.

II. A Handmill, for grinding Corn, by Mr. John Gordon.

III. A Steel-Mill, for grinding Corn, by Mr. Peter Lyon. The premium of fifty pounds was equally divided between theſe two candidates, January 11, 1758.

IV. A

IV. A Hand-Mill, by Mr. Samuel Parſons; for which he had a premium of fifty pounds, December 6, 1758.

V. A Hand-Mill, by Mr. Charles Lloyd; for which he had a Bounty of fifty pounds, and twenty pounds allowed him for his expences, June 17, 1761.

VI. A Hand-Mill, with improvements, by Mr. William Bailey; made by order of the Society from one brought from St. Cas by his royal highneſs the late duke of York, April 11, 1760.

VII. A Model of a Windmill, by Mr. James Verrier; for which he had a Bounty of fifty pounds, December 31, 1761.

VIII. A Model of a Windmill, by Mr. Lewis; for which he had a premium of fifty pounds, October 7, 1761.

IX. A Model of a Machine for raiſing Water, by Mr. Merryman, for which the Society gave him a ſilver medal, February 26, 1766.

X. A Model of a Windmill, by Mr. Nickals, April 23, 1760.

XI. A Model of a Windmill for draining Land; preſented to the Society, by Mr. Collier, May 31, 1758.

XII. Ditto by ditto; for the ſame purpoſe.

XIII. A Trough and Wheel, by ditto; more fully to explain No. XI.

XIV. A Model of a Tidemill, by the Rev. Mr. Gainſborough; for which he had a premium of ſixty pounds, June 1, 1761.

XV. A Model of a Tidemill, by Mr. Coulthard. This model was purchaſed by the Society for twenty pounds, May 12, 1762.

XVI. A Model of a Tidemill, by Mr. Nickals; for which he had a premium of thirty pounds, April 19, 1760.

XVII. A

XVII. A model of a machine, for boring auger-holes, by Mr. William Bailey; for which he had a bounty of fifty pounds, April 19, 1760.

XVIII. A model of a Crane with three powers, by Mr. James Ferguſon; for which he had a bounty of fifty pounds, February 25, 1762.

XIX. A model of a Crane, by Mr. Sanſom; for which he had a bounty of ten guineas, December 18, 1765.

XX. A lock, by Mr. Moore; for which he had a bounty of twenty pounds, March 2, 1763.

XXI. A model of a Four-wheel Carriage, by Mr. Cotton; for which he had a bounty of twenty guineas, November 13, 1767.

XXII. A model of a Four-wheel Carriage, by Meſſrs. Cranefield; for which a bounty of thirty guineas was given, May 20, 1765.

XXIII. The implements uſed by the Dutch in the Turbot Fiſhery.

XXIV. A model of a Four-wheel Fiſh Carriage, by Mr. Stephen Boult; for which he had the firſt premium of twenty pounds, May 12, 1762.

XXV. A model of a Two-wheel Fiſh Carriage, by ditto; for which he had the firſt premium of fourteen pounds, May 12, 1762.

XXVI. A model of a Two-wheel Fiſh Carriage, by Mr. Joachim Smith; for which he had the ſecond premium of ſeven pounds, May 12, 1762.

XXVII. Two machines, (exactly ſimilar to each other) for trying ſhips blocks, made by Mr. William Bailey, under the direction of Mr. Gardener, November 6, 1761.

XXVIII. A model of a machine for raiſing Water by means of a ſpiral Tube, by Mr. Wirts, communicated to the Society, by Mr. Zeigler; for which Mr. Zeigler had the gold medal of the Society, January 6, 1768.

XXIX. A

XXIX. A model of an Apparatus for ſaving the lives of men aboard of ſhips, ſtranded on a lee ſhore, by Mr. John Winn; for which he had the ſilver medal of the Society, February 25, 1767.

XXX. A compaſs and protractor, by Mr. Aaron Miller; for which he had a bounty of ten guineas, February 11, 1767.

XXXI. A model of a machine, for grinding and poliſhing Glaſs by horſe, wind, or water; by Mr. Jeremiah Burrows, purchaſed by the Society for twenty pounds, June 10, 1767. The original, of which this is a model, was kept at work three months, in conſequence of the Society's premiums; for which Mr. Burrows had ſeventy pounds, May 20, 1765.

XXXII. An expanding Rod for gauging veſſels, by Mr. Efford; for which he had a bounty of twenty guineas, April 22, 1767.

XXXIII. A pair of door-hinges with ſpiral ſprings, by Mr. Delvitz; for which he had a bounty of fifteen pounds, February 3, 1768.

XXXIV. A model of a Crane, by Mr. Pinchbeck; for which he had a gold medal, June 3, 1767.

XXXV. A model of a Machine, preſented to the Society by Keane Fitzgerald, Eſq; May 25, 1768.

XXXVI. A model of Dr. Hales's Ventilator, preſented to the Society by Mr. Thomas Yeoman, November 30, 1768.

XXXVII. A model of a Machine for making Wheel-Tyre, by Mr. Hunt; for which he had a bounty of ten guineas, June 6, 1769.

XXXVIII. An inſtrument for gauging Veſſels, by Mr. Efford; for which the Society gave him a bounty of fifteen guineas, June 6, 1769.

XXXIX. A pair of new-invented Coach Springs, by Mr. Jacob, Coach-maker; for which he had a bounty of twenty guineas, 1769.

XL. An

XL. An Hydraulic Machine, by Mr. Weſtgarth; for which he had a bounty of fifty guineas 1769.

XLI. A portable Iron Oven, by Mr. Clements; for which he had a bounty of fifty guineas 1770.

XLII. A Bolting-mill, by Mr. Nathaniel Stedman; for which he had a bounty of ten guineas 1770.

XLIII. A machine to teach blind Perſons the Rules of Arithmetic, by Mr. Granville; for which he had a bounty of fifteen guineas 1770.

XLIV. A Bolting-mill, by Mr. Thomas Preſton; for which he had a bounty of ten guineas 1771.

XLV. A Jack for the uſe of Houſe and Ship-builders, by Mr. Abraham Staghold; for which he had a bounty of twenty guineas 1771.

XLVI. A Saſh Pully, by Mr. Flower; for which he had a bounty of three guineas 1771.

XLVII. A Worm Auger, by Mr. Phineas Cook, of Sheffield; for which he had a bounty of ten guineas 1771.

XLVIII. An Index Balance, by Mr. Sebaſtin Clayſs; for which he had a ſilver medal 1771.

XLIX. A Machine for bruiſing Oats and Malt, by Mr. Wilcox, of Tamworth; for which he had twelve pounds, part of the premium 1771.

L. A Breaſt Wimble, with an Application of Dr. Hook's univerſal Joint, by Mr. Delivitz; for which he had a bounty of ten guineas 1771.

LI. A Model of a Wheel Carriage to turn in the leaſt Angle, by Mr. William Bailey. jun. for which he had a premium of twenty guineas 1772.

LII. A Model of a new conſtructed Arch, by Mr. Arrrow, of Rocheſter-row, whereby the lateral preſſure is conſiderably diminiſhed; for which he had the gold medal 1772.

LIII. A

LIII. A Machine for ſlicing Turneps, &c. by Nicholas Turner, Eſq: of Bignor Park, Suſſex; for which he had the ſilver medal 1772.

LIV. A Machine to give an alarm in caſe of Fire or Thieves, by Meſſrs. Inols and Jewers; for which they had a bounty of twenty guineas 1771.

LV. A Gun Harpoon, by Mr. Abraham Staghold; for which he had a bounty of twenty guineas 1772, and a further bounty of thirty guineas 1773.

LVI. A falling Hinge, by Mr. Gaſcoigne; for which he had the ſilver medal 1773.

LVII. An Apparatus to prevent the ill effects of Mercury in Water Gilding, by Mr. J. Hill, of Oxford-ſtreet; for which he had a premium of twenty guineas 1774.

LVIII. A Machine to cut Chips for Hats, by Mr. Galloway; for which he had a bounty of twenty-five guineas 1775.

LIX. A Machine for weighing Gold Coin, preſented to the Society, by Mr. Matthew Hill, of Scarborough, 1775.

LX. A Model of a Machine to raiſe Ore, &c. by Mr. Hulman; for which he had a bounty of five guineas 1775.

LXI. A Gun and Harpoon, preſented to the Society, by Mr. Richard Gibſon, of Whitby, 1775; for which the Society gave him a bounty of thirty guineas.

LXII. A Floating Light for ſaving the Lives of thoſe who fall overboard at Sea, by Mr. William Shipley, of Maidſtone; for which the Society gave him the ſilver medal 1776.

LXIII. A Model of a Poſt Coach for turning in the leaſt Angle, by Mr. John Hudſon; for which he had a bounty of ten guineas 1776.

LXIV. A Coach Brace, by Mr. Groce, of Hoxton; for which he had a bounty of ten guineas 1776.

LXV. A Model of an Apparatus for fiſhing up Things from the Bottom of the Sea, by Mr. Frazer; for which he had a bounty of ten guineas 1776.

LXVI. An

LXVI. An iron frame for an Umbrella, by Mr. Mackenzie; for which he had a bounty of two guineas, 1776.

LXVII. A model of a Perch Bolt, and a model of an Axle Tree, by Mr. Hall; for which he had a bounty of fifteen pounds, 1777.

CLASS III.

Machines and Models, ſubſervient to Agriculture.

I A Model of a Machine for drying Madder; preſented to the Society by Mr. George Rutt, May 11, 1763.

II. A Bee-Box; preſented to the Society by Charles Whitworth, Eſq; Vice-Preſident, March 1, 1763.

III. Two Brabant Scythes, for reaping Corn of different ſorts; preſented to the Society by William Hanbury, Eſq;

IV. A model of a Plough for turning up Heath Ground, by Mr. Ringroſe.

V. A model of a Thiſtle-cutter, by Mr. Ringroſe; for which models he had a bounty of ten guineas, March 16, 1763.

VI. A Land-Roller; preſented to the Society by Mr. Scawen, of Carſhalton, Surry, Auguſt 5, 1761.

VII. A model of a Plough with ſix ſhares and coulters, by Mr. Robert Gee, May 13, 1767.

VIII. A

VIII. A Drain-Plough, by Mr. Cuthbert Clarke, purchaſed by the Society, June 1, 1767.

IX. A Drain-Plough, by Mr. William Knowles; for which he had a premium of fifty pounds, May 20, 1767.

X. A Drill-Plough, by M. De Chateau-vieux.

XI. A ſingle Cultivator, by ditto.

XII. A double ditto, by ditto. Theſe inſtruments were purchaſed by order of the Society, October 9, 1765.

XIII. A Scarificator; preſented to the Society by Mr. John Winn Baker, of Ireland, April 8, 1767.

XIV. A Drill-Plough, by the Rev. Mr. Gainſborough; for which he had a premium of thirty pounds, May 14, 1766.

XV. A Drill-Plough, by Mr. Willey; for which he had twenty pounds. The premium of fifty pounds being divided in the above manner between theſe candidates, May 14, 1766.

XVI. A Drill-Plough, with improvements, by ditto; purchaſed by the Society June 24, 1767.

XVII. A Horſe-Hoe for deſtroying Weeds; invented by the Rev. Mr. Hewit.

XVIII. Ditto, with a Harrow, by ditto.

XIX. A Machine for winnowing Corn, by Mr. Evers.

XX. A Machine for dreſſing Flour, by ditto. Theſe machines were purchaſed of Mr. Evers, January 14, 1761.

XXI. A model of a Machine for dreſſing Wheat and Malt, by Mr. Mackell; for which he had a bounty of fifty pounds.

XXII. A Cyder-Mill, by Mr. Charles Lloyd.

XXIII. A Cyder-Preſs, by ditto. Theſe models were purchaſed of Mr. Lloyd, for twenty guineas, March 25, 1761.

XXIV. A

XXIV. A Machine for ſlicing Turneps, by Mr. Edgill; for which he had a Premium of twenty pounds, December 10, 1766.

XXV. A Perambulator for meaſuring roads, by Mr. Edgworth; for which he had a ſilver medal, April 8, 1767.

XXVI. A Model of a Field-Gate, by Mr. Thomas Orm; for which he had a bounty of ten pounds, April 3, 1766.

XXVII. A Trenching-Plow, by Mr. Ducket.

XXVIII. A Three-Furrow Plough, by ditto; for which Ploughs he had a bounty of fifty pounds, June 24, 1767.

XXIX. A Model of a Machine for threſhing Corn, by Mr. Evers; for which he had a bounty of fifty pounds, February 3, 1768.

XXX. A Model of a Machine for making cloſe Drills, by Mr. Beſtland; for which he had a bounty of ten guineas, February 22, 1769.

XXXI. A Model of a temporary Barn, preſented to the Society by Richard Lovel Edgeworth, Eſq.

XXXII. A Drill-Plough, by Mr. Craik, for which the Society gave him a gold medal, 1770.

XXXIII. A Drill-Plough, preſented to the Society by Dr. Gale, for which the Society gave him the gold medal, 1770.

XXXIV. A covered Drain-Plough, by Mr. Makins, of Clare, in Suffolk; for which he had a bounty of fifty guineas, 1770.

XXXV. A Machine for cutting Straw, by Mr. William Bailey; for which he had a bounty of twenty guineas, 1770.

XXXVI. An Apparatus for deſtroying inſects on Melon beds, by Mr. Thomas Green, of the Queen's Gardens,

at Kew; for which he had a premium of twenty pounds, 1771.

XXXVII. A Plough, by Mr. Cuthbert Clarke, made agreeable to the principles laid down in his eſſay, entitled, An Account of the principles of an improved Plough; for which the Society gave him a gold medal, 1771.

XXXVIII. A Model of a Machine for levelling land, by Mr. Chriſtopher Saverland; for which he had the gold medal, 1771.

XXXIX. A Plough, with a Circular Coulter, to overcome obſtructions in ploughing ſtubble, or rough ground, by Matthew Peters, Eſq; of Newport, in the Iſle of Wight; for which he had a ſilver medal, 1772.

XL. A Spring and Index, for aſcertaining the force of the draught, in ploughing; invented by Mr. More, and made at the expence of the Society, 1772.

XLI. A Drill-Plough, by Mr. Thomas Hope, of Eccles, near Mancheſter; for which he had a premium of twenty pounds, 1773.

XLII. An Iron Plough, by Mr. Brand, of Manningtree, Eſſex; for which he had a bounty of twenty guineas, 1773.

XLIII. A Machine to cut Straw, by Mr. Stephen Smith, of Heathfield, Suſſex; for which he had a premium of twenty guineas, 1774.

XLIV. A new invented Plough, for mending roads, by Mr. Chriſtopher Pinchbeck, made at the expence of the Society; for which invention, the Society gave Mr. Pinchbeck the gold medal, 1774.

XLV. A Model of a Scarificator, preſented to the Society by M. Butler, of Yorke, 1775.

CLASS

CLASS IV.

Machines and Improvements, ſubſervient to Chemiſtry.

I. A Digeſter, by Mr. Creagh; for which he had a bounty of thirty guineas, December 1, 1762.

II. A portable Furnace, &c. for trying Experiments in Chemiſtry, by Dr. Lewis.